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ABSTRACT

Twenty-four units on health service careers are presented in this teacher's guide. The units are organized into four sections as follow: Section A--Orientation (health careers, career success, Health Occupations Students of America); Section B--Health and First Aid (personal health, community health, and first aid); Section C--Body Structure and Function and Applied Skills (microbiology, basic concepts of physical sciences, endocrine system, genitourinary system, respiratory system, musculoskeletal system, nervous system, digestive system, and circulatory system); and Section D--Basic Health Assistant Skills (nutrition, patient cleanliness, patient environment and bedmaking, body mechanics and positions, vital signs, medical asepsis, surgical asepsis, isolation technique, and observation and recording). Each instructional unit generally contains eight components: performance objectives; an outline of minimum instructor and student activities to accomplish unit objectives; information sheets presenting basic unit content; transparency masters; job sheets which outline skills to be achieved; student assignment sheets related to the unit information sheets (answer keys are provided); and objective tests with answer keys. (JH)

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CE 022 274

HEALTH SERVICE CAREERS

Jamee Reid Sloan, Health Occupations Curriculum Specialist
State Department of Vocational and Technical Education
Stillwater, Oklahoma

Developed by the
Curriculum and Instructional Materials Center
For the division of Health Occupations Education
Oklahoma State Board of Vocational and Technical Education
Yvonne Bender, State Supervisor
Leslie Fisher, Chairman
Francis T. Tuttle, Director
Bob Patton, Coordinator, Curriculum and Instructional Materials Center
1979

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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FOREWORD

We believe that the single most effective way to improve vocational education is through the development of a good and sound instructional materials delivery system. This manual is designed to be used in the Health Service Careers program. The material was developed through the combined efforts of the health instructors, the State Supervisor of Health Occupations and her assistant, and teacher educators.

The Health Service Careers program is combined exploration and skill program that enables the student to study the many different occupations in the health field and develop skills in the assisting roles. Because of technological advance new occupations with updated equipment and skills call for the training of qualified male and female health workers. After the completion of the program, students will be skilled as health assistants to various health professionals in health facilities.

We value the Health Service Careers manual as an instructional asset to build program uniformity, set minimum program standards, and provide a base for teacher and student accountability. This material is a foundation upon which the instructor can build by motivating, localizing and personalizing to meet the needs and interests of the student.

It is our belief that the instructors will be able to use this material to encourage and prepare workers to meet the over expanding health care field.

Francis T. Tuttle, State Director
State Department of Vocational and
Technical Education

Yvonne Bender, State Supervisor
Heatlh Occupations Education

PREFACE

New career opportunities in the health profession are developing daily due to new and updated technology. The health field is looking for enthusiastic, skilled workers to fill this demand. For one interested in developing pride in a profession dedicated to serving others, a health career should be pursued.

The Health Service Careers program provides an excellent opportunity for exploration into the various occupations offered in health. Not only does the student acquire knowledge of the various professions, but also is prepared to accept employment as a certified health assistant.

This manual was designed to aid the teacher in encouraging students to be aware of the many areas in health that offer a variety of stable, well-paying, important jobs with opportunities for advancement. The information contained in this book came from highly qualified health teachers who were aware of a need to compile consistent material to develop a unified program. We believe that this manual can be used as a basis for the training of well-prepared health assistants who will be efficient members of the growing health team.

Caring for humanity will never go out of style and people who give themselves to help others can never be replaced by machines.

Jamee Reid Sloan
Health Curriculum Specialist
Curriculum and Instructional
Materials Center

USE OF THIS PUBLICATION

Instructional Units

Health Service Careers curriculum includes four areas. Each area consists of three or more units of instruction. Each instructional unit includes some or all of the basic components of a unit of instruction: performance objectives, suggested activities for teacher and students, information sheets, assignment sheets, job sheets, visual aids, tests, and answers to the test. Units are planned for more than one lesson or class period of instruction.

Careful study of each instructional unit by the teacher will help to determine:

A. The amount of material that can be covered in each class period
B. The skills which must be demonstrated
    1. Supplies needed
    2. Equipment needed
    3. Amount of practice needed
    4. Amount of class time needed for demonstrations
C. Supplementary materials such as pamphlets or filmstrips that must be ordered
D. Resource people that must be contacted

Objectives

Each unit of instruction is based on performance objectives. These objectives state the goals of the course, thus providing a sense of direction and accomplishment for the student.

Performance objectives are stated in two forms: unit objectives, stating the subject matter to be covered in a unit of instruction, and specific objectives, stating the student performance necessary to reach the unit objective.

Since the objectives of the unit provide direction for the teaching-learning process, it is important for the teacher and students to have a common understanding of the intent of the objectives. A limited number of performance terms have been used in the objectives for this curriculum to assist in promoting the effectiveness of the communication among all individuals using the materials.

Following is a list of performance terms and their synonyms which may have been used in this material:

Name	Identify	Describe
Label	Select	Define
List in writing	Mark	Discuss in writing
List orally	Point out	Discuss orally
Letter	Pick out	Interpret
Record	Choose	Tell how
Repeat	Locate	Tell what
Give		Explain

Order
Arrange
Sequence
List in order
Classify
Divide
Isolate
Sort

Distinguish
Discriminate

Construct
Draw
Make
Build
Design
Formulate
Transcribe
Reduce
Increase
Figure

Demonstrate
Show your work
Show procedure
Perform an experiment
Perform the steps
Operate
Remove
Replace
Turn off/on
(Dis) assemble
(Dis) connect

Reading of the objectives by the student should be followed by a class discussion to answer any questions concerning performance requirements for each instructional unit.

Instructors should feel free to add objectives which will fit the material to the needs of the students and community. When a teacher adds objectives, he/she should remember to supply the needed information, assignment and/or job sheets, and criterion tests.

Suggested Activities

Each unit of instruction has a suggested activities sheet outlining steps to follow in accomplishing specific objectives. Duties of the instructor will vary according to the particular unit. However, for best use of the material they should include the following: provide students with objective sheet, information sheet, assignment sheets, and job sheets; preview filmstrips, make transparencies, and arrange for resource materials and people; discuss unit and specific objectives, information sheet, and assignment sheets; demonstrate and discuss procedures outlined on job sheets; give test. Teachers are encouraged to use any additional instructional activities and teaching methods to aid students in accomplishing the objectives.

Information Sheet

The information sheet provides content essential for meeting the cognitive (knowledge) objectives of the unit. The teacher will find that the information sheet serves as an excellent guide for presenting the background knowledge necessary to develop the skill specified in the unit objective.

Students should read the information sheet before the information is discussed in class. Students may take additional notes on the information sheet.

Transparency Masters

Transparency masters provide information in a special way. The students may see as well as hear the material being presented, thus reinforcing the learning process. Transparencies may present new information or they may reinforce information presented in the information sheet. They are particularly effective when identification is necessary.

Transparencies should be made and placed in the notebook where they will be immediately available for use. Transparencies direct the class's attention to the topic of discussion. They should be left on the screen only when topics shown are under discussion. (NOTE: Stand away from the overhead projector when discussing transparency material. The noise of the projector may cause the teacher to speak too loudly.)

Assignment Sheets

Assignment sheets give direction to study and furnish practice for paper and pencil activities to develop the knowledges which are necessary prerequisites to skill development. These may be given to the student for completion in class or used for homework assignments. Answer sheets are provided which may be used by the student and/or teacher for checking student progress.

Job Sheets

Job sheets are an important segment of each unit. The instructor should be able to and in most situations should demonstrate the skills outlined in the job sheets. Procedures outlined in the job sheets give direction to the skill being taught and allow both student and teacher to check student progress toward the accomplishment of the skill. Job sheets provide a ready outline for a student to follow if he/she has missed a demonstration. Job sheets also furnish potential employers with a picture of the skills being taught and the performances she/he might reasonably expect from a person who has had this training.

Test and Evaluation

Paper-pencil and performance tests have been constructed to measure student achievement of each objective listed in the unit of instruction. Individual test items may be pulled out and used as a short test to determine student achievement of a particular objective. This kind of testing may be used as a daily quiz and will help the teacher spot difficulties being encountered by students in their efforts to accomplish the unit objective. Test items for objectives added by the teacher should be constructed and added to the test.

Test Answers

Test answers are provided for each unit. These may be used by the teacher and/or student for checking student achievement of the objectives.

Page Numbering System

Each section in this publication is assigned a specific letter: (A) Orientation; (B) Health and First Aid; (C) Body Structure and Function and Applied Skills; (D) Basic Health Assistant Skills. Pages are numbered consecutively within each section. For example, Orientation covers pages 1-A through 148-A. If the page is available as a transparency master, TM appears at the bottom of the page.

The following key will help to easily identify each section by color:

White - Objectives and Transparency Masters

Green - Information Sheets

Buff - Assignment Sheets

Blue - Job Sheets

Yellow - Test

Pink - Suggested Activities, Answers to Assignment Sheets, and Answers to Test

ACKNOWLEDGEMENTS

Appreciation is expressed to the many individuals who gave their time, skills, and knowledge in the preparation of this publication.

The content of this manual was prepared and reviewed by:

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HEALTH CAREERS
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to name major areas in health career fields and advantages of being a health worker. The student should also be able to explore a chosen health career and evaluate a job selection. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with health careers to their correct definitions.
2. Select from a list personality charactertistics desirable for people entering the health field.
3. Name advantages of being involved in health care service occupations.
4. Name major areas in the health career field.
5. Match the types of dental professions to their correct job descriptions.
6. Match nursing professions to their correct descriptions.
7. Name job opportunities available in the pharmacy field.
8. Select from a list tasks that medical laboratory workers are qualified to perform.
9. Describe job tasks of inhalation therapists.
10. Match the types of therapy/rehabilitation careers to their correct descriptions.
11. Name business and administrative occupations within the hospital.
12. Explore a chosen health career.
13. Examine job interests.
14. Evaluate an occupational selection.
15. Increase self-awareness.
16. Complete self-assessment rating.

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HEALTH CAREERS
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

- A. Provide students with objective sheet.
- B. Provide students with information sheet.
- C. Discuss unit and specific objectives.
- D. Discuss information sheet.
- E. Provide information for students to use in completing assignment sheets.
- F. Invite resource people from different health occupations to speak to class and HOSA groups.
- G. Tour hospital and have students draw a diagram of the different departments, giving job descriptions for the jobs contained in each department.
- H. Hold a scavenger hunt in a health institution, and outline different areas where the students can obtain articles.

  (NOTE: Obtain permission of institutions first and be sure to give student directions on how to conduct their hunt.)
- I. Have a style show that depicts different types of uniforms and duty clothing worn by the different professions.

  (NOTE: Many uniform shops are happy to come to your school to show new styles. Students may be involved by modeling the various apparel. Be sure to include uniforms for male and female students. This may be used as a HOSA fund raising activity.)
- J. Create bulletin boards and display cases with a new health occupation each week, or let students choose an occupation and be responsibile for information shown.
- K. Role play different occupations giving students assignments and have them create appropriate costumes and a script.
- L. Involve the VIEW (Vital Information for Education and Work) program to promote and inform students about different health careers.

  (NOTE: For information contact Les Miller, Director of Oklahoma VIEW Program, State Department of Vocational and Technical Education, 1515 W. 6th Ave., Stillwater, Oklahoma 74074, (405) 377-2000 or Joe Fogelstrom, Coordinator, VIEW, State Dept. of Education, Hodge Education Building, Oklahoma City, Oklahoma 73105, (405) 521-2426.)
- M. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Assignment sheets

      1. Assignment Sheet #1--Explore a Chosen Health Career

      2. Assignment Sheet #2--Examine Job Interests

      3. Assignment Sheet #3--Evaluate an Occupational Selection

      4. Assignment Sheet #4--Increase Self-Awareness

      5. Assignment Sheet #5--Complete Self-Assessment Rating

   D. Test

   E. Answers to test

III. Unit references:

   A. Oklahoma Council for Health Careers. *Profiles of Health Careers*. 1974-75 edition. Oklahoma City, Oklahoma, 1974.

   B. Sawatzky, Joyce. *Family Living*. Stillwater, OK: Oklahoma State Department of Vocational-Technical Education/Curriculum and Instructional Materials Center, 1978.

IV. Additional resources:

   A. Films

      1. "Health Careers." Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, Oklahoma 73105.

      2. "Nursing." Oklahoma State Department of Health.

      3. "Is a Career in the Health Services for You?"* Counselors Films, Incorporated, 2100 Locust Street, Philadelphia, PA 19103.

   B. Associations

      1. Oklahoma Council For Health Careers
      P.O. Box 53151
      Oklahoma City, Oklahoma 73105
      Phone (405) 271-5739

   (NOTE: Pamphlets on all of the health service careers can be obtained by writing or calling this agency. They are also helpful in finding work for trained health workers.)

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*Also available only to Oklahoma teachers from Oklahoma State Department of Vocational-Technical Education/Curriculum and Instructional Materials Center, 1515 W. 6th St., Stillwater, OK 74074.

2. American Dental Association
211 East Chicago Avenue
Chicago, Illinois 60611

3. American Dietetic Association
620 N. Michigan
Chicago, Illinois 60611

4. National Registry for Emergency Medical Technicians
P.O. Box 29233
Columbus, Ohio 43229

5. American College of Hospital Administrators
840 N. Lakeshore Drive
Chicago, Illinois 60611

6. American Society of Clinical Pathologists
2100 West Harrison Street
Chicago, Illinois 60612

7. American Association of Medical Assistants
One East Wacker Drive
Chicago, Illinois 60601

8. American Medical Record Association
875 N. Michigan Ave., Suite 1850
Chicago, Illinois 60611

9. American Registry for Radiologic Technologists
2600 Wayzetta Boulevard
Minneapolis, Minnesota

10. Oklahoma State Nurses Association
4400 N. Lincoln Boulevard
#153 Mark Twain Building
Oklahoma City, Oklahoma 73105

11. American Occupational Therapy Association
6000 Executive Boulevard, Suite 200
Rockville, Maryland 20852

12. Oklahoma Optometric Association
590 United Founders Tower
Oklahoma City, Oklahoma 73112

13. American Orthotic and Prosthetic Association
1440 N. Street N.W.
Washington, D.C. 20005

14. American Association of Colleges of Pharmacy
8121 Georgia Ave., Suite 800
Silver Spring, Maryland 20910

15. American Physical Therapy Association
1156 15th St. N.W.
Washington, D.C. 20005

16. Association of American Medical Colleges
One DuPont Circle, N.W.
Washington, D.C. 20036

17. American Academy of Physician Assistants
2150 Pennsylvania Ave., Room 356
Washington, D.C. 20037

18. American Podiatry Association
20 Chevy Chase Circle, N.W.
Washington, D.C. 20015

19. Oklahoma County Mental Health Association
3113 Classen Boulevard
Oklahoma City, Oklahoma 73118

20. American Society of Radiology Technologists
500 N. Michigan Avenue, Suite 836
Chicago, Illinois 60611

21. American Speech and Hearing Association
9030 Old Georgetown Road
Washington, D.C. 20014

22. Association of Operating Room Technicians
8085 Prentice Avenue
Englewood, Colorado 80110

23. American Veterinary Medical Association
600 S. Michigan Avenue
Chicago, Illinois 60605

HEALTH CAREERS
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Career--Progress of individual in work; may include variety of jobs, occupations, and professions

B. Job--Group of similar positions in a work situation

C. Work--Any kind of planned or responsible activity in which an individual engages with expectation of a return for efforts

D. Occupation--Group of similar jobs

E. Self-awareness--Ability to recognize own values, ambitions, and goals

F. Personality--Sum of a person's distinctive individual qualities

G. Cardiologist--Physician who specializes in treatment of heart disorders

H. Dermatologist--Physician who specializes in treatment of skin diseases

I. Gynecologist--Physician who specializes in treatment of female reproductive system diseases

J. Neurologist--Physician who specializes in treatment of diseases of the nervous system

K. Proctologist--Physician who specializes in treatment of disorders of the rectum, colon, and anus

L. Obstetrician--Physician who specializes in treatment of women during pregnancy and childbirth

M. Pediatrician--Physician who specializes in treatment of children's diseases

N. Psychiatrist--Physician who studies, treats, and prevents mental illness

O. Orthopedist--Physician who specializes in treatment of disorders and diseases of the muscles, tendons, and bones

P. Urologist--Physician who specializes in treatment of diseases of the urinary tract

Q. Nurse clinician--Registered nurse with general knowledge of nursing theory and practice who is particularly skilled in a clinical specialty

(NOTE: Nurse practitioner is a similar job title. They can work independently in solving patient care problems.)

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INFORMATION SHEET

R. Podiatrist--Physician who specializes in treatment of disorders of the feet

II. Personality characteristics desirable for people entering the health field

A. Sincere interest in others

B. Poise

C. Tactfulness

D. Determination

E. Honesty

F. Flexibility

G. Warmth

H. Responsibility

III. Advantages of being involved in health care service occupations

A. Variety of work

(NOTE: Health care professions are expanding every day as new equipment, new techniques, and new treatments are found to eliminate and treat disease.)

B. Professional pride

(NOTE: There is a certain amount of prestige in being a health professional, and many people look to you for answers to questions concerning health. You have an opportunity to teach good health practices.)

C. Availability of work and geographic mobility

(NOTE: Demand exceeds supply at this time; work for the health service person is always available at many different types of facilities in many locations.)

D. Advancement

(NOTE: In almost all of the health professions, there is upward mobility. Using the education and skills already learned as a base, a career reaching higher levels can be built.)

E. Salary and benefits

(NOTE: Wages earned as a health service worker are stable and promotions with raises occur every three to six months in most areas. Benefits may include health insurance, discount on all health care by professionals, and some institutions have retirement and savings plans for their employees.)

INFORMATION SHEET

F. Excellent work environment

(NOTE: Health institutions are very clean and have a very pleasant atmosphere. Co-workers in all health areas work as an efficient team to provide the best health care possible.)

IV. Major areas in health career field

A. Dentistry

Examples: Dentist, including all the specialty areas, dental hygienist, dental technician, dental laboratory technician, dental assistant

B. Medicine

Examples: Physician, including all the specialty areas, veterinarian, osteopath, chiropractor, physician's assistant, medical researcher

(NOTE: Specialty areas for a medical doctor require four years of medical school and then two to eight years studying in the specialty areas.)

C. Nursing

Examples: Registered nurse, licensed practical nurse, nurse assistant/orderly, nurse practitioner in many specialty areas, emergency medical technician, surgical technician

D. Dietetics

Examples: Nutritionist, dietician, dietetic aide, diet technician

E. Inhalation therapy

Examples: Inhalation technician, inhalation therapy assistant

F. X-ray

Examples: Radiology isotope technician, X-ray technician, nuclear medical technician

G. Therapy/rehabilitation

Examples: Physical therapist, orthotist/prosthetist, recreational therapist, occupational therapist, speech pathologist, audiologist, psychiatric aide

H. Optics

Examples: Optometrist, opthalmologist, optician

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INFORMATION SHEET

I. Pharmacy

Examples: Pharmacist, pharmacy aide

J. Housekeeping, sanitation, and maintenance

Examples: Executive housekeeper, hospital engineer

K. Laboratory

Examples: Medical laboratory technician/technologist, certified laboratory assistant

L. Administrative, clerical, and communications

Examples: Hospital administrator, hospital photographer, hospital librarian, medical records technician, public relations officer, medical assistant, medical secretary/receptionist

V. Dental professions

A. Dentist--Diagnoses, prevents, and corrects tooth and gum disorders; extracts, fills, and cleans teeth

(NOTE: There are many special areas that the dentist can enter.)

Examples: Orthodontist, pediodontist, endodontist

B. Dental hygienist--Cleans teeth, takes X-rays, teaches patients proper way to care for teeth

(NOTE: This may be a two-year associate degree program or a four-year baccalaureate program.)

C. Dental assistant--Prepares patients for examination; hands instruments to dentists during treatment; helps process X-rays; serves as receptionist, secretary, and bookkeeper, if needed

D. Dental laboratory technician--Constructs complete and partial dentures and orthodontic appliances from dentist's prescription

(NOTE: Junior colleges offer a two-year associate degree program, and vocational and private schools offer one- and two-year programs. Further information on the dental field can be obtained by writing to the American Dental Association, 211 East Chicago Avenue, Chicago, IL 60611.)

INFORMATION SHEET

VI. Nursing professions

(NOTE: There are many specialty areas open to the registered nurse and the licensed practical nurse. Advancement through training and education can open many doors into a more specific and technical career.)

Write to: ANA-NLN Nursing Careers Program
American Nurses Association
Kansas City, Missouri 64108

A. Registered nurse--Plans and surpervises care of patient according to physician's instructions; reports and records progress of patient; teaches other health care team members; can provide nursing care and administer medications especially in special care areas

(NOTE: There are three types of programs at this time for the R.N.: the two-year associate degree program, the three-year diploma program, and the four-year baccalaureate degree program.)

B. Licensed practical nurse--Works under the direction of registered nurses or a physician; gives direct care to patient by giving medications and treatments and observing and reporting progress of patient

(NOTE: Many programs to educate the L.P.N. are conducted in vocational schools and community colleges. The basic course in practical nursing takes one year.)

C. Nursing assistant--Works under the direction of a licensed person to give patients personal care, such as bedmaking, feeding, ambulating, taking vital signs and answering light calls

(NOTE: Training programs are offered in vocational schools, hospitals, and other health agencies. Length of time ranges from six weeks to one year depending upon the type of training given by the program.)

VII. Job opportunities in the pharmacy field

A. Hospital pharmacist

B. Retail pharmacist

C. Pharmacy detail salesperson for drug company

D. Researcher for pharmaceutical laboratory

VIII. Tasks medical laboratory workers are qualified to perform

A. Drawing blood from patients and examining it microscopically and chemically

B. Analyzing chemical composition of body fluids and tissues

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INFORMATION SHEET

C. Identifying blood factors for transfusions

D. Testing serum for antibodies

E. Tracing cancer with radioactive isotopes

F. Culturing bacteria to identify disease-causing organisms

(NOTE: Qualified medical laboratory technologists are required to have a bachelor's degree in science and one year in a school of medical technology. The technologist can specialize in many different areas. The certified laboratory assistant is trained in a one-year approved private school or hospital program.)

IX. Job tasks of inhalation therapist

A. Administering oxygen (O_2)

B. Keeping complete and accurate records of treatments and equipment

C. Maintaining, cleaning, and repairing all equipment

D. Instructing patients on how to perform beneficial breathing exercises

E. Teaching patients, nurses, interns, and other health assistants about techniques and equipment at the bedside

F. Working as part of a resuscitation team to administer inhalation therapy with equipment

X. Types of therapy/rehabilitation careers

A. Physical therapist--Works with patients who are disabled by illness or accident or who are born with a handicap; utilizes skills and knowledge to restore as much function as possible and prevent disability following injury or disease

(NOTE: Education and training require a four-year baccalaureate degree and an internship in some institutions.)

B. Orthotist and prosthetist--Makes and fits braces for the support of weakened limbs or correction of body defects; makes and fits artificial limbs

(NOTE: A two-year associate degree and a four-year degree program with an internship are offered.)

INFORMATION SHEET

C. Occupational therapist--Treat patients of all ages with physical, emotional, and educational deficiencies; provides carefully selected activities that will guide patient to a greater independence, using abilities within limitations, and to a more meaningful life; works closely with physician to determine method of treatment

(NOTE: Education for occupational therapy can begin at the certificate level for a twenty-two-month program to a four-year degree program and a graduate course with a year internship.)

D. Psychiatric aide--Trained to work closely with patients in a mental hospital to gain their confidence and establish a rapport that is therapeutic in the recovery process; also trained to do simple nursing tasks, such as bathing, feeding, and taking vital signs

(NOTE: Training is usually on-the-job by the facility.)

E. Speech pathologist and audiologist--Evaluates and diagnoses hearing and speech disorders; directs corrective therapy; conducts conferences with patients and parents

(NOTE: Education requires a four-year degree program and internship.)

XI. Business or administrative occupations within the hospital

A. Medical records technician

(NOTE: This person's responsibilities include providing a system for acquiring, processing, and storing information so that it can be available at a moment's notice. Information comes from each member of the professional staff and can be released only to authorized people.)

B. Hospital administrator

(NOTE: This person is responsible for directing and coordinating all hospital activities and acts as a governing authority between staff and departments within the hospital. A selected board supervises his/her activities.)

C. Ward clerk or secretary

(NOTE: This person works on patient units, keeps all records and charts in order, and coordinates information with all departments to the unit.)

D. Public relations officer

(NOTE: This person is responsible for all press releases and all information that concerns the institution, its staff, and patients.)

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HEALTH CAREERS
UNIT I

ASSIGNMENT SHEET #1--EXPLORE A CHOSEN HEALTH CAREER

What questions does a person ask about an occupation or occupational group in which he/she may be interested? Before you start to study and investigate an occupation, you should have an outline of the subjects you wish to explore. A topical outline helps to make a study flow naturally from one topic to another.

Example:
- Definition of the occupation and nature of the work
- Number and distribution of workers
- Qualifications and training
- Methods of entering
- Career advancement
- Employment outlook
- Earnings
- Working conditions
- Social and psychological factors

Use the form on the following pages to report your investigation of an occupation. Major sources of occupational information include counselors; libraries (school and public); films, filmstrips, tapes, and slides; professional, trade, and business associations; labor unions; people working in the field; employers; government agencies; and chambers of commerce.

Definition and Nature of Occupation ________________________

____

____

____

Number and Distribution of Workers

____

____

____

____

____

____

ASSIGNMENT SHEET #1

Qualifications and Training Needed

(Education, Special Talents, Physical Requirements)

Chances of Getting a Job

ASSIGNMENT SHEET #1

CAREER ADVANCEMENT

EMPLOYMENT OUTLOOK

$ALARY & EXTRA BENEFITS

Work Conditions

ASSIGNMENT SHEET #1

Social and Psychological Factors

Advantages and Disadvantages

HEALTH CAREERS
UNIT I

ASSIGNMENT SHEET #2--EXAMINE JOB INTERESTS

What kind of job would you like to have and how important is it to you? Indicate the degree of importance you would personally attach to each item. Check VI (Very Important), I (Important), UI (Unimportant), or VU (Very Unimportant) in the blanks to the left of each job characteristic.

VI	I	UI	VU		
				1.	Ability Utilization: I could do something that makes use of my abilities.
				2.	Achievement: The job could give me a feeling of accomplishment.
				3.	Activity: I could be busy all the time.
				4	Advancement: The job would provide an opportunity for advancement.
				5.	Authority: I could tell people what to do.
				6.	Company Policies & Practices: The company would carry out its policies fairly.
				7.	Compensation: My pay would compare well to that of other workers.
				8.	Co-workers: It would be easy to make friends with my co-workers.
				9.	Creativity: I could try out some of my own ideas.
				10.	Independence: I could work alone on the job.
				11.	Moral Values: I could do the work without feeling that it is morally wrong.
				12.	Recognition: I could get recognition for the work I do.
				13.	Responsibility: I could make decisions on my own.
				14.	Security: The job would provide for steady employment.
				15.	Social Service: I could do things for other people.
				16.	Social Status: I could be respected in the community.

Adapted from an activity developed by Mary Klaurens, Lorraine Hansen, and W. Wesley Tennyson. Satisfactions and Rewards of Work: A Career Resource Guide. St. Paul: Pupil Personnel Services Section, Minnesota State Department of Education, 1972.

ASSIGNMENT SHEET #2

VI	I	UI	VU	
				17. Supervision-Human Relations: My boss would back up the employees.
				18. Supervision-Technical: My boss would train employees well.
				19. Variety: I could do something different every day.
				20. Working Conditions: The job would have good working conditions. (NOTE: Determine if this job would entail working indoors in a confined space or out of doors in different types of weather.)
				21. Job Hazards: The job may have some dangerous aspects or tasks. There are protective devices or equipment to be used.

HEALTH CAREERS
UNIT I

ASSIGNMENT SHEET #3--EVALUATE AN OCCUPATIONAL SELECTION

Once you have a career path, you can determine if it is, in fact, the right choice for you!

A majority of today's workers just "fell into" the kind of work they do without making any special plans. They took a job because it was "time" to get a job. Planning and careful evaluation can make the difference.

For the next forty-five years or so, you'll be spending close to half your waking hours working. Much of the nonworking half will be taken up with spin-off tasks related to your job: getting ready for work, commuting to work, taking lunch breaks at work, or resting up from work.

Consider the oyster. This little shellfish has it made in absolute economic and social security. The oyster has a house--a shell--to protect it from its enemies. When hungry, the oyster simply opens its shell and food rushes in for a tasty treat.

The eagle is something else. This bird sees the blue sky as the limit. The eagle must build its own house, often on the highest mountain crag where storms threaten it every day. For food the eagle flies through miles of rain and snow and wind. This winged creature is short on security but long on freedom.

Which way of living appeals more to you--good security or high risk? Or perhaps you don't think much of either extreme and would prefer something in between the life-styles of the oyster and the eagle. What you prefer is one thing. What you get depends on how wisely you choose a career. That's because the career you pick will be the number one influence on the kind of life you'll have. It's a major factor in determining:

- the kinds of friends you'll have
- how much money you'll make
- how much you'll travel and where
- the type of home you'll be able to afford
- if you'll always be supervised by others or perhaps be your own boss someday

ASSIGNMENT SHEET #3

- what kind of car you'll drive
- how much leisure time you'll have and how you'll spend it
- the sort of person you'll marry
- where in the world you'll live
- whether you'll look forward to steady pay-days or live in fear of lay-offs
- personal health standards

Everything you do in the future will revolve around your choice of career. By far, your career is one of the most critical decisions facing you at this stage in your life!!!

Ask yourself the following questions about the occupation investigated in Assignment Sheet #1.

		Yes	No
1.	Is it CHALLENGING?		
2.	Is it INTERESTING and will the interest last over the years?		
3.	Can I meet the PHYSICAL and MENTAL STANDARDS of others in this field?		
4.	Is the SALARY close to what I need to live comfortably?		
5.	Is the work SATISFYING as well as PROFITABLE?		
6.	Will the WORKING CONDITIONS be an asset or a liability to my life-style?		
7.	Are there related fields where my skills will be VALUABLE, leaving me other OPTIONS?		
8.	Will it be PRACTICAL to acquire the necessary CREDENTIALS . . . or am I reaching too far?		
9.	Is the occupation EXPANDING--or might it become obsolete in the foreseeable future?		

HEALTH CAREERS
UNIT I

ASSIGNMENT SHEET #4--INCREASE SELF-AWARENESS

Self-awareness can be called a prerequisite to personal development. To be able to make sound decisions about future direction, you must recognize your values, ambitions, and goals. Furthermore, you need to know your relationship to others and just how you fit into the scheme of life, whether at home, at school, or in the community.

The purpose of this assignment is to help you become more aware of yourself and your feelings. The following questions are to be answered quickly, relying on first thoughts, and should not be dwelt upon for any period of time. Use your answers for later reference in class discussion.

(NOTE: These questions have no right or wrong answers!)

1. What is your favorite color? ______________________________
2. What subject do you enjoy most in school? ____________________
3. What is your favorite holiday? ______________________________
4. What food pleases your appetite most? ________________________
5. What car do you like best? ______________________________
6. What makes you sad? ______________________________

   Happy? ______________________________
7. If you could only save one personal item, what would it be? __________

   ____
8. At what time in history would you choose to live? ______________

   ____
9. If you had any one place you could visit, where would it be? __________

   ____
10. What special talents would you like to have? __________________

    ____
11. What quality would you add to your personality or character? __________

    ____
12. What quality would you like to get rid of? ____________________

    ____

ASSIGNMENT SHEET #4

13. What is your favorite pastime?

14. If you could spend one hour talking with anyone in the world, who would it be?

15. What is your biggest problem or concern that you need to solve right now?

The most important thing is how quickly and surely you are able to respond. Discuss and compare with classmates the difficulties encountered in answering how it might be possible to become more aware of self, and what self-awareness means. Remember:

SELF-AWARENESS

↓

SELF-ACCEPTANCE

↓

POSITIVE SELF-IMAGE

↓

SUCCESS

HEALTH CAREERS
UNIT I

ASSIGNMENT SHEET #5--COMPLETE SELF-ASSESSMENT RATING

One of the best ways to assess yourself or your personality is to rate yourself honestly and critically. The self-rating list for the IDEAL health worker, given below, will help to give you some clues to the things health employers will look for in you.

Rate yourself as follows:

(5) Excellent
(4) Very Good
(3) Average
(2) Below Average
(1) Needs Improvement

_____ Clean uniform, attractive and appropriate dress (rate wearing apparel at this time)

_____ Clear, well modulated voice

_____ Easily controlled posture in bending, sitting, walking, and standing

_____ Good physical health

_____ Poised and well controlled, especially under difficult conditions

_____ Enjoyment of people and being with people

_____ Courteousness in dealing with patients and their relatives

_____ Ability to understand and appreciate other people's problems and responsibilities

_____ Promptness and reliability in reporting to the job

_____ Willingness to follow the rules and regulations of the institution

_____ Willingness to work to improve efficiency and working conditions

_____ Good sense of humor but not at the expense of others

_____ Cooperation with other staff members

_____ Enthusiasm which is sincere and contagious

_____ Constructive reaction to criticism

_____ Quick and accurate decision making

_____ Perseverance

ASSIGNMENT SHEET #5

_____ Willingness to look for opportunities to serve others better

_____ Exertion of positive leadership

_____ Freedom from prejudice

_____ Loyalty to superiors and associates

HEALTH CAREERS
UNIT I

TEST

NAME ____________________ SCORE __________

1. Match terms associated with health careers to their correct definitions by placing the correct numbers in the appropriate blanks.

_____a. Group of similar jobs

_____b. Group of similar positions in work situation

_____c. Sum of a person's distinctive individual qualities

_____d. Any kind of planned or responsible activity in which an individual engages with expectation of a return for efforts

_____e. Progress of individual in work; may include variety of jobs, occupations, and professions

_____f. Ability to recognize own values, ambitions, and goals

_____g. Physician who specializes in treatment of disorders and diseases of the muscles, tendons, and bones

_____h. Physician who specializes in treatment of heart disorders

_____i. Physician who specializes in treatment of disorders of the rectum, colon, and anus

_____j. Physician who specializes in treatment of diseases of the urinary tract

_____k. Physician who specializes in treatment of disorders of the feet

_____l. Registered nurse with general knowledge of nursing theory and practice who is particularly skilled in a clinical specialty

1. Career
2. Job
3. Work
4. Occupation
5. Self-awareness
6. Personality
7. Proctologist
8. Nurse clinician
9. Urologist
10. Orthopedist
11. Podiatrist
12. Cardiologist

_____m. Physician who specializes in treatment of diseases of the nervous system

_____n. Physician who studies, treats, and prevents mental illness

_____o. Physician who specializes in treatment of skin diseases

_____p. Physician who specializes in treatment of female reproductive system diseases

_____q. Physician who specializes in treatment of children's diseases

_____r. Physician who specializes in treatment of women during pregnancy and childbirth

13. Psychiatrist
14. Obstetrician
15. Dermatologist
16. Pediatrician
17. Neurologist
18. Gynecologist

2. Select from the list below personality characteristics desirable for people entering the health field by placing an "X" in the appropriate blanks.

_____a. Determination

_____b. Warmth

_____c. Lackadaisical

_____d. Indifference

_____e. Poise

_____f. Sincere interest in others

_____g. Manipulative

_____h. Tactfulness

_____i. Pretentious

_____j. Honesty

_____k. Flexibility

_____l. Responsibility

3. Name four advantages of being involved in health care service occupations.

a. ____

b. ____

c. ____

d. ____

4. Name five major areas in the health career field.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

5. Match types of dental professions to their correct job descriptions by placing the correct numbers in the appropriate blanks.

______a. Prepares patients for examination; hands instruments to dentists during treatment; helps process X-rays; serves as receptionist, secretary, and bookkeeper, if needed

______b. Cleans teeth, takes X-rays, teaches patients proper way to care for teeth

______c. Constructs complete and partial dentures and orthodontic appliances from dentist's prescription

______d. Diagnoses; prevents, and corrects tooth and gum disorders; extracts, fills, and cleans teeth

1. Dentist
2. Dental hygienist
3. Dental assistant
4. Dental laboratory technician

6. Match nursing professions to their correct descriptions by placing the correct numbers in the appropriate blanks.

______a. Works under the direction of a licensed person to give patients personal care such as bedmaking, feeding, ambulating, taking vital signs, and answering call lights

______b. Works under the direction of registered nurses or a physician; gives direct care to patients by giving medications and treatments, and observing and reporting progress of patient

______c. Plans and supervises care of patient according to physician's instructions; reports and records progress of patient; teaches other health care team members; can provide nursing care and administer medications especially in special care areas

1. Registered nurse
2. Licensed practical nurse
3. Nursing assistant

7. Name two job opportunities available in the pharmacy field.

a. ______________________________

b. ______________________________

8. Select from the list below tasks that medical laboratory workers are qualified to perform by placing an "X" in the appropriate blanks.

_____a. Diagnosing disease conditions

_____b. Tracing cancer with radioactive isotopes

_____c. Identifying blood factors for transfusions

_____d. Administering blood transfusions

_____e. Drawing blood from patients and examining it microscopically and chemically

_____f. Analyzing the chemical composition of body fluids and tissues

_____g. Recommending treatment

_____h. Testing serum for antibodies

_____i. Culturing bacteria to identify disease-causing organisms

9. Describe job tasks of inhalation therapists.

____

____

____

____

____

____

____

____

____

____

____

____

10. Match types of therapy/rehabilitation careers to their correct descriptions by placing the correct numbers in the appropriate blanks.

_____a. Trained to work closely with patients in a mental hospital to gain their confidence and establish a rapport that is therapeutic in the recovery process; also trained to do simple nursing tasks, such as bathing, feeding, and taking vital signs

_____b. Makes and fits braces for the support of weakened limbs or correction of body defects; makes and fits artificial limbs

_____c. Evaluates and diagnoses hearing and speech disorders; directs corrective therapy; conducts conferences with patients and parents

_____d. Treats patients of all ages with physical, emotional, and educational deficiencies; provides carefully selected activities that will guide patient to a greater independence, using abilities within limitations, and to a more meaningful life; works closely with physician to determine method of treatment

_____e. Works with patients who are disabled by illness or accident or who are born with a handicap; utilizes skills and knowledge to restore as much function as possible and prevent disability following injury or disease

1. Physical therapist
2. Orthotist and prosthetist
3. Occupational therapist
4. Psychiatric aide
5. Speech pathologist and audiologist

11. Name two business or administrative occupations within the hospital.

a. ____

b. ____

12. Explore a chosen health career.

13. Examine job interests.

14. Evaluate an occupational selection.

15. Increase self-awareness.

16. Complete a self-assessment rating.

(NOTE: If activities 12-16 have not been accomplished prior to the test, ask the instructor when they should be completed.)

HEALTH CAREERS
UNIT I

ANSWERS TO TEST

1. a. 4
   b. 2
   c. 6
   d. 3
   e. 1
   f. 5
   g. 10
   h. 12
   i. 7
   j. 9
   k. 11
   l. 8
   m. 17
   n. 13
   o. 15
   p. 18
   q. 16
   r. 14

2. a, b, e, f, h, j, k, l

3. Any four of the following:
   a. Variety of work
   b. Professional pride
   c. Availability of work and geographic mobility
   d. Advancement
   e. Salary and benefits
   f. Excellent work environment

4. Any five of the following:
   a. Dentistry
   b. Medicine
   c. Nursing
   d. Dietetics
   e. Inhalation therapy
   f. X-ray
   g. Therapy/rehabilitation
   h. Optics
   i. Pharmacy
   j. Housekeeping, sanitation, and maintenance
   k. Laboratory
   l. Administrative, clerical, and communications

5. a. 3
   b. 2
   c. 4
   d. 1

6. a. 3
   b. 2
   c. 1

7. Any two of the following:
   a. Hospital pharmacist
   b. Retail pharmacist
   c. Pharmacy detail salesperson for drug company
   d. Researcher for pharmaceutical laboratory

8. b, c, e, f, h, i

9. Description should include:
   a. Administering oxygen (O_2)
   b. Keeping complete and accurate records of treatments and equipment
   c. Maintaining, cleaning, and repairing all equipment
   d. Instructing patients on how to perform beneficial breathing exercises
   e. Teaching patients, nurses, interns, and other health assistants about techniques and equipment at the bedside
   f. Working as part of resuscitation team to administer inhalation therapy with equipment

10. a. 4
    b. 2
    c. 5
    d. 3
    e. 1

11. Any two of the following:
    - a. Medical records technician
    - b. Hospital administrator
    - c. Ward clerk or secretary
    - d. Public relations officer
12. Evaluated to the satisfaction of the instructor
13. Evaluated to the satisfaction of the instructor
14. Evaluated to the satisfaction of the instructor
15. Evaluated to the satisfaction of the instructor
16. Evaluated to the satisfaction of the instructor

CAREER SUCCESS
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to arrange in order steps to take in finding and securing a job and name job training sources and sources for locating employment opportunities. The student should also be able to prepare a resumé, use the telephone to arrange interview, and evaluate personal habits associated with career success. This knowledge will be evidenced through completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with career success to their correct definitions.
2. Arrange in order steps to take in finding and securing a job.
3. Name sources for locating employment opportunities.
4. Distinguish among operations of employment services.
5. Select from a list guidelines for dressing for an interview.
6. Name job training sources.
7. Discuss ways to increase self-satisfaction in a career.
8. Select from a list reasons why people lose jobs.
9. Prepare a resumé.
10. Write a cover/application letter.
11. Complete an employment application form.
12. Use telephone to arrange a job interview.
13. Participate in a job interview.
14. Evaluate a job offer.
15. Write a follow-up letter.
16. Compare job opportunities.
17. Ask for a raise.

18. Write a letter of resignation.
19. Evaluate personal habits associated with career success.
20. Improve listening skills.
21. Interview an employer.

CAREER SUCCESS
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

   A. Provide student with objective sheet.

   B. Provide student with information and assignment sheets.

   C. Discuss unit and specific objectives.

   D. Discuss information and assignment sheets.

   E. Provide the necessary information and equipment to complete assignment sheets.

   F. Invite resource people from employment agencies, health care services, and personnel departments to speak to group about interview, job placement, and career and opportunity counseling.

   G. Use role playing in Assignment Sheet #5 to practice for HOSA skill contest in Job Interview and Application categories.

   H. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Assignment sheets

      1. Assignment Sheet #1--Prepare a Resumé

      2. Assignment Sheet #2--Write a Cover/Application Letter

      3. Assignment Sheet #3--Complete Employment Application Form

      4. Assignment Sheet #4--Use Telephone to Arrange a Job Interview

      5. Assignment Sheet #5--Participate in a Job Interview

      6. Assignment Sheet #6--Evaluate a Job Offer

      7. Assignment Sheet #7--Write a Follow-up Letter

      8. Assignment Sheet #8--Compare Job Opportunities

      9. Assignment Sheet #9--Ask for a Raise

10. Assignment Sheet #10--Write a Letter of Resignation

11. Assignment Sheet #11--Evaluate Personal Habits Associated With Career Success

12. Assignment Sheet #12--Improve Listening Skills

13. Assignment Sheet #13--Interview an Employer

D. Test

E. Answers to test

III. Unit references:

A. Sawatzky, Joyce et al. *Home Economics I: Basic Core*. rev. ed. Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1977.

B. Eggland, Steven A., and Williams, John W. *Human Relations in Business*. Dallas: South-Western Publishing Co., 1977.

IV. Other references:

A. *Career World*. 501 Lake Forest Avenue, Highwood, IL 60040

B. *Critical Steps of Job Interviewing.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1978.

V. Films:

(NOTE: The following films may be ordered only by Oklahoma teachers from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 W. Sixth, Stillwater, OK 74074. Out-of-state teachers may order the films from the addresses listed below.)

A. "Your Job: Fitting In." Coronet Films, 65 East South Water Street, Chicago, IL 60601.

B. "Get that Job: Line Up Your Interview." Coronet Films.

CAREER SUCCESS
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Interview--Meeting of prospective employer and job applicant for evaluation and questioning

B. Resumé--Written statement or summary of information about an individual that would be of interest to a prospective employer; may also be referred to as personal data sheet

C. Blind ad--Classified advertising that does not identify the advertiser

(NOTE: Applicant is asked to send a letter of application and resumé to a post office box number or to call a certain number.)

Example:

Medical Assistant
8:00 - 2:30
NO SMOKING PLEASE
928-6702 ext. 25

D. Help-wanted ad--Advertisement telling what kind of job is available and what qualifications are required

Example:

LPN SUPERVISOR
Wanted 11-7 shift.
Must be licensed in
Okla. and have some
experience in supervisory
work. Contact Sunnyside
Nursing Center. 982-6758

E. Employment/situation wanted ad--Classified advertisement placed by an individual seeking employment indicating the job seeker's qualifications

Example:

COMPANION/HOME NURSE
Certified nursing assistant
seeks work as companion and
home care nurse for elderly
person. Will do light house-
keeping and cooking. Have own
transportation. Call 923-6745
after 4:00 p.m.

F. Employment agency--Business designed to help individuals find employment

(NOTE: These agencies are used primarily by persons wanting positions as medical office assistants, medical secretaries, or receptionists in medical offices.)

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INFORMATION SHEET

G. Medical personnel services--Organized to aid health workers in finding employment in hospitals, in nursing homes, and for homebound people in staffing and supplying medical care

H. Application form--Printed form on which job applicant records information about her/his personal history, job history, job experience, education, and references

I. Technical knowledge--Information about a job and skills needed to adequately perform a job

Example: An X-ray technician must know how to position patients, use X-ray machines and other equipment, and how to process the films; a laboratory technician must know how to draw blood, what tests are to be performed, and what chemicals and equipment are needed to carry out procedures

J. Human relations--Continuous process of getting along with people

(NOTE: It is of the utmost importance that health workers be able to work with their co-workers and patients and their families.)

K. Ethics--Code or standard of behavior; professional conduct

L. Attitude--Feelings about people, things, and ideas

(NOTE: An attitude can make or break your job. Your role in the health field will put you in contact with many different people in many varied situations and will entail thinking through how you feel and how you will react.)

M. Communication--Sharing of a message or an idea which results in a high amount of understanding between the sender and the receiver of the message

N. Habit--Action that is acquired and has become automatic; tendency to perform a certain action

O. Learning attitude--On-going alertness for any new knowledge or training

P. Job enrichment programs--Activities designed for technical development and worker improvement; may be in the form of demonstration, meetings, or short conferences

(NOTE: Many institutions and organizations hold workshops, institutes, or short courses to bring the health worker up to date on new equipment and new techniques and updates on present procedures.)

INFORMATION SHEET

Q. Malpractice insurance--Policy that covers health worker in case of accident or injury to person receiving care

Example: Patient slips and falls and charges nurse was careless and caused accident; insurance will cover the charges if necessary

(NOTE: Many facilities and professional people have malpractice insurance to cover their employees. Many of the professional organizations and insurance companies have policies that individuals can take out. It is advisable that each health worker have some type of malpractice insurance to cover them as they work with the public.)

R. Gross earnings--Entire salary without any deductions

S. Net earnings--Salary after deductions

(NOTE: Deductions may include Social Security, federal withholding, insurance, and retirement.)

II. Steps in finding and securing a job

(NOTE: You may not get the job that first time and that first interview may not be what you expected. Do not be discouraged; look at the experience as a learning situation. Evaluate yourself and work to improve the weak points and polish the good ones.)

A. Write down a complete self-inventory

(NOTE: Consider your abilities, experiences, training, personality, working conditions you desire, and what you want from life. Also consider your limitations and your need for more training, education, and the fact that you might have to take lesser jobs first to get more experience to qualify for the job level you desire. BE HONEST WITH YOURSELF.)

B. Write down a list of employer possibilities

C. Write down a list of possible contacts to help you in your job search

D. Prepare for a job interview (Assignment Sheets #1-#5)

(NOTE: Decide on the method of seeking the job interview. Would a telephone call or a letter be better? Will you need a resumé? Decide on a follow-up method if the interview is not decisive.)

E. Estimate salary

(NOTE: Look at the newspaper to get an idea of the pay range for the job. Age and experience are factors in determining starting pay. When you see the letters DOE in the ad this means the salary depends on the experience the applicant has. Imagine yourself hiring you; what do you have to sell and of what value is it to a prospective employer?)

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INFORMATION SHEET

III. Sources for locating employment opportunities

A. People

(NOTE: Tell people that you are job hunting. The more people who are aware that you are interested in obtaining a job, the better your chances for locating employment.)

Examples: Teachers, counselors, ministers or priests, friends, relatives, neighbors, acquaintances, political officials, business people, and people employed in the type of work you want

B. Newspapers

(NOTE: Use situation wanted columns, help wanted ads, general listings by employment agencies, and blind ads.)

C. Employment agencies

D. Health care services

Examples: Nurse Finders, Medical Personnel Pool, Upjohn Health Care Service, The Visiting Nurse Association

E. Former employers

(NOTE: Ask for references to other business people and for a letter of recommendation.)

F. Personnel offices of health facilities

G. School placement services

H. Professional journals and newsletters

IV. Operation of employment services

A. Private agencies

1. Charge placement fee for services

(NOTE: Fee-paid jobs mean employer pays the placement fee.)

2. Collect fee when employment is secured

3. Request signed contract between you and agency

4. Controlled by state laws

INFORMATION SHEET

B. Public agencies

1. Do not charge placement fee for services
2. Supported by state or federal government funds
3. Give helpful aptitude tests and counseling, if needed

C. Health care services

1. Do not charge placement fee for services
2. Provide full or part-time work placement
3. Provide in-service education training, if needed
4. Cover health worker with malpractice insurance
5. May pay social security and worker's compensation insurance
6. Pay health workers daily in some cases
7. Allow worker to choose work hours and specialty area

V. Guidelines for dressing for an interview

A. Consider kind of job

(NOTE: You should not wear a uniform when seeking employment but do dress neatly and appropriately.)

B. Dress to fit salary range

(NOTE: Dress to fit the salary range for which you are applying.)

C. Consider age of the interviewer

(NOTE: Generally, older people prefer more conservative dress.)

D. Coordinate clothing

(NOTE: Consider colors, patterns, fabrics, and suitable types for shape of face and body structure.)

E. Be conservative

(NOTE: In most cases, avoid high-fashion items and fads.)

Examples: Traditional shoes vs. high-heeled shoes, simple jewelry, natural looking make-up, no strong colognes or aftershaves, no sunglasses during interview

The Oklahoma State Department of Vocational and Technical Education does not discriminate on the basis of race, creed, color, national origin, sex, age, veteran status, or qualified handicap.

INFORMATION SHEET

F. Be modest

G. Wear appropriate undergarments under clothing

H. Be well-groomed

(NOTE: Health workers should look very clean and neat. Hair needs to be simple, clean, and pulled back away from face. Nails should be clean and filed short. If dress code is not mentioned in interview, ask what type of uniform will need to be worn and what rules there are for cologne and jewelry.)

VI. Job training sources

A. On-the-job training

B. Extension courses

C. Correspondence and TV courses

D. Community and junior colleges

E. Area vocational schools

F. Specialized military training

(NOTE: The military will often furnish tuition and room and board funds to attend a type of health program with the stipulation that you spend time in the service after you complete your program.)

G. Special schools

Examples: Private schools that teach health professions, medical assistants, medical secretaries, bookkeepers, receptionists, dental assistants, and other related occupations

H. Apprenticeship programs

Example: Private practice dentists train on-the-job, chairside assistant

VII. Ways to increase self-satisfaction in a career

A. Have a positive attitude

B. Be enthusiastic

C. Keep an open mind

(NOTE: Try to learn something new each day. In the health field, new equipment and new techniques are being tried each day and you can be the most up-to-date worker if you will be receptive.)

INFORMATION SHEET

D. Read all of the journals, newsletters, and texts available that pertain to your profession

E. Join and be active in your professional organizations

F. Volunteer to attend any workshops or in-service programs that your institution might offer

(NOTE: The more you know about your job and your profession, the happier you will be. If you want to further your education and training, set realistic goals and work to attain them. Climb that ladder to a higher rung in the health world.)

VIII. Reasons people lose jobs

A. Lack of technical knowledge

(NOTE: Lack of or low ability to execute skills required in a particular job can account for loss of employment. Look at all available opportunities to learn the needed skills or to brush up on learned skills in which you feel weak.)

B. Poor human relations and attitude

(NOTE: The biggest factor of all is how you conduct yourself with the health team and the patients and their families. If you are not a "people" person, then you may want to look for an occupation that does not demand working with the public.)

C. Low dedication to work ethic

Examples: Continual tardiness, calling in sick at the last moment or not at all, poor grooming habits, dishonesty in your work, disloyalty to your place of employment, carelessness in what you do

(NOTE: Employers and the people you care for deserve your very best. You should strive to do your honest best and give the care and concern that you would want to receive. In return, you have the right to work in an atmosphere of appreciation for your efforts and one in which you feel comfortable to learn and grow in your field.)

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CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #1--PREPARE A RESUMÉ

Your resumé represents YOU on paper. This leaves the first impression of you with your prospective employer and may determine if you will get the interview. A GOOD RESUMÉ SHOULD IMMEDIATELY GIVE PROSPECTIVE EMPLOYERS A BRIEF SUMMARY OF YOUR ACCOMPLISHMENTS, EDUCATIONAL BACKGROUND, WORK EXPERIENCE, SKILLS, AND JOB OBJECTIVE. In short, what can you do for them?

USING THE INFORMATION GIVEN BELOW, WRITE A RESUMÉ TO BE INCLUDED WITH YOUR LETTER OF APPLICATION. You may use the same ad for which you chose to write your letter of application or select another one from your local newspaper.

1. Inspect several resumé formats and choose one that best fits your needs or use the example on the following page as a guide.
2. Type your resumé on 8 1/2 x 11 inch white paper. Try not to exceed one page, but try to fill the page.
3. Use parallel constructions to insure a consistent writing style.
4. Phrase concisely but avoid using abbreviations.
5. Spell correctly. Many employers will not consider persons who have resumés that include misspelled words.
6. Put your name prominently at the top in the center or upper right-hand corner. Beneath name, give your full street address, city, state, zip number, telephone number with area code, and a number where messages can be accepted.

   (NOTE: If you are applying for jobs out of town, leave space to type local phone number, address, and dates available.)
7. Do not include birthplace, age, health, height, weight, sex, marital status, photo, salary, or reasons for leaving job. Avoid religious and political affiliations.

   (NOTE: The whole point of the resumé is to get employers interested to meet you in person. The above information may or may not come out in the interview, but by not including this information, there is little chance of discrimination. However, if you feel that you would benefit by adding the above information, you may do so.)
8. Describe your job objective or career goal briefly. Don't restrict yourself to a specific job unless you are quite experienced.
9. Describe your educational background, giving dates of enrollment, diploma or degrees received, and names of schools attended. Include grade average (if favorable) and major course of study. If you include school grades, be sure they are related to the jobs you have in mind. If pertinent, mention additional or graduate courses, scholarships, and summer school.

ASSIGNMENT SHEET #1

(NOTE: Applicants with less than one year of work experience should list education before work experience; with more than one year, put experience first. IN RESUMÉ WRITING. ACCENTUATE THE POSITIVE, ELIMINATE THE NEGATIVE.

10. List your past employment, starting with the most recent job. Carefully examine all the jobs you've done, including extracurricular activities. CONCENTRATE ON THE SKILLS. Don't catagorize "summer jobs."

    (NOTE: The list should include the name of the company, your job title, and your major duties. The starting and termination dates for each job should be listed. Most employers ask during interviews why you left previous jobs. Try to be positive in stating your reasons for leaving a former job. Avoid downgrading your previous employers.)

11. List skills useful to the job. Remember, you have to prove your value to the company, especially if you have little experience.

    (NOTE: Use active verbs to indicate the specific tasks you performed, initiated, directed, or planned.)

    Examples: Use microscope for minor lab studies

    Perform venipuncture

12. Include the following information if it is relevant and if there is enough space: hobbies and interests, extracurricular activities, clubs, honors you have received.

13. List or be ready to list at least three persons whom you have asked to give you a positive recommendation.

    (NOTE: Use business references, teachers, character references and avoid listing relatives unless you have actually worked for them on a salaried basis. Include some method for prospective employer to acquire references.)

14. Write "confidential" at the top of the resumé and letter to alert the reader that you don't want your current employer to know you are looking for employment.

    (NOTE: Try to give a telephone number where you can receive confidential calls.)

15. Have local printer retype your resumé and reproduce several copies. Request white bond paper.

    (NOTE: Your resumé's physical appearance is VERY IMPORTANT. Avoid using ditto or carbon copies. Be sure to proofread the printer's work. Always bring extra copies to interview.)

ASSIGNMENT SHEET #1

EXAMPLE OF RESUME′

CONFIDENTIAL

Jan Michaels

Address	Present	Permanent
	127 E. Beacon Your town, Your state Zip code 301 567-2898	Same
Job Objective	Career as dental hygienist	
Education	Yourtown, High School, Yourtown, Your State, 1974-1978 Progress Vocational School, Yourtown, Your State, 1979 Certificate: Dental Assistant Grade average: 3.6 on a 4.0 scale	
Work Experience	Mercy Clinic, Yourtown, Your State. May 1978-August 1979. Duties include making appointments, typing records, greeting patients. Classy Cafe, Yourtown, Your State. June 1976-April 1978. Recorded customer orders, operated cash register, and ordered supplies	
Special Skills	Type 60 words per minute, operate cash register, type from a dictaphone, file records and update information.	
School Activities	High school orchestra, Glee Club, President of Pep Club, Secretary of 1979 Dental Assistant Class, HOSA	
References	References will be furnished by letter upon request.	

(NOTE: For this type of reference procedure, be sure to have a completed list of names, addresses, and phone numbers of references in advance of interview.)

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #2--WRITE A COVER/APPLICATION LETTER

The cover/application letter is a sales technique to tell the employer how your abilities will be useful to the company. The letter should specify your qualifications while the resume' gives general background information.

Use the sheet of ads at the end of this assignment or select one from your local paper and write a cover/application letter to accompany the resume' you prepared in Assignment Sheet #1. Use the following information and the sample letters as guides.

(NOTE: If you cannot type, it is recommended that you write or print NEATLY using blue or black ink.)

1. Form and appearance
    a. Type or write neatly
    b. Write on only one side of paper
    c. Avoid smudges and typographical errors
    d. Use 8 1/2 x 11 inch white bond paper, not personal or fancy paper
    e. Spell, capitalize, and punctuate correctly
    f. Put employer's full name, title, and address
    g. Include your full name and address with zip number on the letter
2. Information
    a. Write to a specific person

       (NOTE: Find out the name of the executive/personnel manager/employer you want to reach and the correct title. When in doubt, write to the top person who will refer your resume' to the right party. Use "To Whom It May Concern" if answering a blind ad.)
    b. Be brief; do not repeat information already in the resume'
        1. State the position for which you are applying
        2. Avoid needless details
        3. Cover all points requested in the advertisement in exactly the order for which they are asked

           (NOTE: Some prospective employers make it a point of testing the applicant's ability to follow directions.)

ASSIGNMENT SHEET #2

c. State reason for interest in job

(NOTE: Employers look for people who look for future advancement opportunities rather than just a paycheck.)

d. Refer briefly to the main points in the attached resumé

e. Mention that persons listed on the resumé have given their permission to serve as references

f. Request interview at employer's convenience

1. Tell where you can be reached
2. Enclose self-addressed envelope and resumé
3. Say you will phone next week

3. Be original in your approach--Attract attention in opening paragraph

Examples:

Dear Employer:

My experience in office management would be of interest to you.

Dear Employer:

Have you wished you had an assistant who has experience in making orthodontic appliances and assisting dental procedures? I might be the one.

Dear Employer:

____________________ has informed me that you are in need of a person who can type quickly, without error, make appointments, and assist with treatments efficiently. I believe my experience in the medical office assistance program has taught me to handle these tasks in an appropriate manner.

4. End the letter properly

(NOTE: "Sincerely yours" or "Very truly yours" is appropriate.)

5. Use permanent address for the return address and make sure to include the current date.

ASSIGNMENT SHEET #2

6. Staple letter to resumé as it may be circulated to several departments and otherwise become detached

7. Follow-up and phone for an appointment a week later

   (NOTE: Don't be surprised if the resumé has been referred to another department. Remember, they are in business and you may not get immediate attention, especially if you sent a blind letter. Do not give up, but keep trying until you reach the right person and ask for a convenient date to set up an interview.)

8. Keep in touch regarding possible openings now and in the future

   (NOTE: The "job hunt" may take several weeks or even months. It's important to keep your contacts alive without being a nuisance.)

9. What are examples of poor form in the first application letter on the following page?

   ____

   ____

   ____

   ____

10. How did the second letter improve?

    ____

    ____

    ____

    ____

11. On a separate piece of paper, write your own letter.

    ____

    ____

    ____

    ____

    ____

    ____

THERE IS NO "BEST TIME" TO LOOK FOR A JOB. THE "BEST TIME" IS WHEN YOU AND THE JOBS ARE AVAILABLE.

ASSIGNMENT SHEET #2

Dr. J. Crown
423 E. Buck
Dental Clinic
Sometown, Oklahoma
74034

Dr. Crown,

I am looking for a job in a dental office and I saw your add in the paper.

I have worked before so I have some experience.

I that I would enroll in the night school of dental assisting soon.

I hope to hear from you soon.

Your friend,
Amy Incisor

ASSIGNMENT SHEET #2

9302 W. Caries
Sometown, Oklahoma 74034
August 9, 1977

Dr. J. Crown
423 E. Buck
Dental Clinic
Sometown, Oklahoma 74034

Dear Dr. Crown:

Please consider this letter an application for the position of dental assistant for which you have advertised in the Sometown *Daily News*.

After graduating from high school, I worked part time at the Regency Employment Agency as a clerk typist and receptionist. I took basic courses in high school in typing and bookkeeping and enjoy working with people. I would like to enter the health field and have chosen the dental profession.

I would like to enroll in the Sometown School of Dental Assisting evening program that begins August 25, 1979.

I would appreciate the opportunity to come in and talk over this matter with you at your convenience. You may reach me at the above address or by telephone at 372-5040.

Sincerely yours,

Amy Incisor

Amy Incisor

Enclosure

ASSIGNMENT SHEET #2

Nursing
Assistants

We are in need of nursing assistants to work 2nd and 3rd shift. Must have certificate of training and own transportation

DAILY PAY

Malpractice insurance
Worker's Compensation
Uniform Allowance

HEALTH WORKERS
824-5540

RNs & LPNs
Apply in person Cord Nursing Center, 5702 W. Elm Rd., 814-2525

DOCTOR's SEC'Y
Fee pd. New Dr. seeks exp. med. transcriptionist. Salary DOE. Billie, 537-8930. Clark Personnel

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UNIT CLERKS
ORDERLIES
NURSE ASST'S
Immediate openings on all three shifts for exper. help. Must have work ref. from a hospital or nursing home. Exc. benefits and salary commensurate with experience. Please bring Social Security Card. Contact Personnel Office:

Fountain of Youth Hospital
10002 N. Grant
Equal Opp. Emp. M/F/H

MEDICAL ASSISTANT
for
Internal Medicine Group
8:00-2:30
NO SMOKING PLEASE
928-6702 Ext. 25

Nurse's Aides & Medication Aides needed all shifts. Apply Southern Pines, 246 S. 38. Ph. 743-0286.

RN for Family Planning Clinic. Variable hrs. DOE 428-9340

Clinic Aide. Capable of driving van. DOE 428-9374

Medical Asst. Experience necessary. Apply Personnel Office, Goodcity Clinic, 420 NW 60.

Medical Transcriptionist. Exp. necessary. Apply at Dr. Gannon Clinic, 423 E. Attractive Ave.

LPN SUPERVISOR
Wanted 11-7 shift, Roxy Nursing Center, Sunrise City. Contact J. Begood, RN. 940-7843

Medical Professional Positions Open: Respiratory Therapist (CRTT) or three years hospital experience; Medical Technologist (ASCP), (ISCLT), or (AMT); Radiology (ARRT); C.O.R.T. Competitive salary, insurance benefit program, vacation, retirement. Contact Personnel Office Welby Memorial Medical Center, Casey, Okla. 503-2439

REGISTERED PHARMACIST
Director of pharmacy services 72 bed hospital in Sunnyview, State. Contact C. Breeze, Administrator, 234 - 567-4321 collect. Excellent salary and fringe benefits.

MEDICAL CARE, INC.
RNs, LPNs, Nurse Assistants, Orderlies. Part-time--Full-time work available. 248-5450.

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #3--COMPLETE EMPLOYMENT APPLICATION FORM

Compare the following application forms using the guidelines below. Use information corresponding to the classified ad and to your letter of application. Use information about yourself from your resume'.

(NOTE: Although each facility uses its own form, general rules of preparation apply to any form. Example #2 application form is designed for the health profession.)

1. Be prepared
    a. Take pen and pencil with you
    b. Take copies of your resume'
2. Look over entire form before starting to write; do not hurry
3. Follow directions
    a. Note whether information is to be printed or handwritten
    b. Carry out all directions
4. Write clearly, neatly, and legibly
5. Answer briefly
6. Be honest
7. Answer all questions

    (NOTE: If questions do not apply to you, write "NOT APPLICABLE" or "NA" in the space to show that you did not overlook the question.)
8. Include complete information; use resume'
9. RECHECK application when finished
10. Avoid cross-outs and obvious erasure marks
11. Do not list any restrictions to the geographic area in which you would work unless you would absolutely not consider other geographic areas
12. Use the word "OPEN" for questions about minimum salary since most employers pay standardized rates and will not negotiate on this

ASSIGNMENT SHEET #3

HSC - 61-A

"WE ARE AN EQUAL OPPORTUNITY EMPLOYMENT COMPANY. WE ARE DEDICATED TO A POLICY OF NON-DISCRIMINATION IN EMPLOYMENT ON ANY BASIS INCLUDING RACE, CREED, COLOR, AGE, SEX, RELIGION OR NATIONAL ORIGIN: OR PHYSICAL DEFECTS"

APPLICATION FOR EMPLOYMENT

PERSONAL INFORMATION

DATE

NAME
LAST FIRST MIDDLE

PRESENT ADDRESS
STREET CITY STATE ZIP

PERMANENT ADDRESS
STREET CITY STATE ZIP

PHONE NO SOCIAL SECURITY NUMBER

REFERRED BY

EMPLOYMENT DESIRED

POSITION DATE YOU CAN START SALARY DESIRED

ARE YOU EMPLOYED NOW? IF SO MAY WE INQUIRE OF YOUR PRESENT EMPLOYER

EVER APPLIED TO THIS COMPANY BEFORE? WHERE WHEN

EDUCATION	NAME AND LOCATION OF SCHOOL	YEARS ATTENDED	DATE GRADUATED	SUBJECTS STUDIED
GRAMMAR SCHOOL				
HIGH SCHOOL				
COLLEGE				
TRADE, BUSINESS OR CORRESPONDENCE SCHOOL				

SUBJECTS OF SPECIAL STUDY OR RESEARCH WORK

U. S. MILITARY OR NAVAL SERVICE RANK PRESENT MEMBERSHIP IN NATIONAL GUARD OR RESERVES

ACTIVITIES OTHER THAN RELIGIOUS (CIVIC, ATHLETIC, FRATERNAL, ETC.)

EXCLUDE ORGANIZATIONS, THE NAME OR CHARACTER OF WHICH INDICATES THE RACE, CREED, COLOR OR NATIONAL ORIGIN OF ITS MEMBERS.

(CONTINUED ON OTHER SIDE)

62-A

ASSIGNMENT SHEET #3

FORMER EMPLOYERS (LIST BELOW LAST FOUR EMPLOYERS, STARTING WITH LAST ONE FIRST.)

DATE MONTH AND YEAR	NAME AND ADDRESS OF EMPLOYER	SALARY	POSITION	REASON FOR LEAVING
FROM				
TO				
FROM				
TO				
FROM				
TO				
FROM				
TO				

REFERENCES: GIVE BELOW THE NAMES OF TWO PERSONS NOT RELATED TO YOU, WHOM YOU HAVE KNOWN AT LEAST ONE YEAR.

NAME	ADDRESS	BUSINESS	YEARS ACQUAINTED
1			
2			

PHYSICAL RECORD:

LIST ANY PHYSICAL DEFECTS

WERE YOU EVER INJURED? GIVE DETAILS

HAVE YOU ANY DEFECTS IN HEARING? IN VISION? IN SPEECH?

IN CASE OF EMERGENCY NOTIFY

NAME ADDRESS PHONE NO.

I AUTHORIZE INVESTIGATION OF ALL STATEMENTS CONTAINED IN THIS APPLICATION. I UNDERSTAND THAT MISREPRESENTATION OR OMISSION OF FACTS CALLED FOR IS CAUSE FOR DISMISSAL. FURTHER, I UNDERSTAND AND AGREE THAT MY EMPLOYMENT IS FOR NO DEFINITE PERIOD AND MAY, REGARDLESS OF THE DATE OF PAYMENT OF MY WAGES AND SALARY, BE TERMINATED AT ANY TIME WITHOUT ANY PREVIOUS NOTICE.

DATE SIGNATURE

DO NOT WRITE BELOW THIS LINE

TO BE COMPLETED DAY EMPLOYMENT BEGINS

DATE

HEIGHT WEIGHT AGE DATE OF BIRTH

SINGLE MARRIED WIDOWED CITIZEN U.S.A. SEX

THE ABOVE INFORMATION NEEDED FOR PENSION, HOSPITALIZATION INSURANCE, ETC., AND NOT FOR HIRING PURPOSES.

INTERVIEWED BY DATE REMARKS

NEATNESS		CHARACTER	
PERSONALITY		ABILITY	

HIRED FOR DEPT. POSITION WILL REPORT SALARY WAGES

APPROVED: 1. 2. 3.

EMPLOYMENT MANAGER DEPT. HEAD GENERAL MANAGER

HSC - 63-A

ASSIGNMENT SHEET #3

Nightingale Memorial Hospital
2825 Greenlawn Drive
Somewhere, Oklahoma 74320

APPLICATION FOR EMPLOYMENT

(Please type or print)

"An Equal Opportunity Employer"

Date ____________________

Name ____ Social Security No. ____________
(Last) (First) (Middle)

Shift you can work: Full time ______ Part time ______ Days ______ Eves ______ Nites ______

Position desired ______________________________ Starting salary desired ____________

Address ____
(City) (State) (Phone)

What method of transportation will you use to get to work? ______________________

EDUCATION

Circle last year completed: Elementary 5 6 7 8 High 1 2 3 4
College 1 2 3 4 Graduate Work 1 2 3 4

List any degree ______________ Date ______________ School ______________

Do you type? Yes _____ No _____ wpm _____ Shorthand? Yes _____ No _____ wpm _____

Other qualifications: ____
(Licenses, skill with machines, research work, etc.)

FOR PROFESSIONAL APPLICANTS ONLY:

Where did you receive your professional training? ______________________________

Registration or license number ____

MEDICAL RECORDS

*Date of Birth ____________ *Age ____________ *Height ____________ *Weight ____________

Have you had a serious illness in the past 5 years? Yes ______ No ______ (Describe) ____________

____

In case of emergency, please notify ____

*Sex ____________ *Race ____________ *Blood type ____________

*Marital status? Single, Married, Widowed, Divorced, Separated
*(Information for records purposes only)

Have you ever received compensation for injuries? Yes ______ No ______ (Explain) ____________

____

Have you served in the Military Service? Yes ______ No ______ If yes, what branch? ____________

Dates of duty ____________ to ____________ Rank, if discharged ____________________

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #4--USE TELEPHONE TO ARRANGE A JOB INTERVIEW

Making an appointment by phone does two things. First, it shows that you are interested in saving the employer's time. Second, it shows that you are thoughtful for asking what would be the best time for the employer to see you.

1. Steps in making an appointment by phone

   a. Plan what you are going to say before you call

      (NOTE: Outline in writing, if necessary, the main points you wish to cover.)

   b. State your name and reason for calling

      Example: "Hello, this is Ed Molar and I'm calling about your ad in the Sometown *Daily News* for a dental assistant. May I have an appointment for an interview?"

   c. Ask when would be the best time for you to come for the interview

   d. Record the day, time, and place of the interview

   e. Thank the receptionist

2. Things to remember when calling for an appointment

   a. Keep the receptionist on your side; the receptionist is there to help you

      (NOTE: The receptionist is sometimes asked to evaluate the applicant.)

   b. Do not ask over the phone how much the job pays

   c. Be polite and courteous

      (NOTE: Remember that this call is the first contact you may have with the firm. Make that first impression a good one.)

3. Role play a situation where you make an appointment by phone using the checklist on the following page

ASSIGNMENT SHEET #4

		YES	NO
a.	Was prepared before calling		
b.	Did not have to stammer to find the right words		
c.	Identified himself/herself immediately		
d.	Stated reasons for calling immediately		
e.	Asked the best time for an appointment with the employer		
f.	Was courteous and friendly		
g.	Thanked the receptionist		
h.	Made record of the interview date, hour, and place		

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #5--PARTICIPATE IN A JOB INTERVIEW

Now that you are prepared for an interview, team up with another student in class. Assume the roles of interviewer and applicant and then switch so each of you gets to play both roles. Apply for the job you now have or for the one for which you wrote the letter of application. Let your other classmates evaluate your performance using the job interview evaluation form below. Use the sample interview that follows for your role-play.

(NOTE: Videotape the practice sessions, if possible.)

JOB INTERVIEW EVALUATION FORM

Preparing for the Interview

	YES	NO
1. Were you clean, well-groomed, and neat?		
2. Did you wear appropriate clothes and shoes for the type of job for which you are applying?		
3. Did you take an ink pen and resumé with the information you may need about Social Security, references, addresses, dates employed, and dates attended school?		
4. Did you go alone, not taking parents or friends with you?		
5. Were you on time for the interview?		
6. Did you know the name and title of the interviewer?		
7. Did you know pertinent facts about the company, such as name, kind of facility, services, reasons you want to work there, and what specialty areas are available?		
8. When you met the receptionist did you smile, introduce yourself, state that you have an appointment, follow the receptionist's instructions, and wait patiently?		

ASSIGNMENT SHEET #5

Participating in the Interview

		YES	NO
9.	Did you enter with poise and greet the interviewer by name?	☐	☐
10.	Did you shake hands firmly if the interviewer offered her/his hand?	☐	☐
11.	Did you introduce yourself and state the purpose of the call?	☐	☐
12.	Did you seat yourself only at the interviewer's invitation?	☐	☐
13.	Did you show signs of nervousness? (NOTE: If you do not know where to put your hands, leave them on your lap and keep them still.)	☐	☐
14.	Did you avoid placing personal things on interviewer's desk, smoke, or chew gum?	☐	☐
15.	Did you look alert, interested, and enthusiastic? (NOTE: Sit slightly forward in the chair to give an alert appearance.)	☐	☐
16.	Were you confident and courteous? (NOTE: Words such as *Mr., Ms., Miss, Mrs., please, thank you,* and *sir* never go out of style.)	☐	☐
17.	Did you answer questions clearly and avoid interrupting?	☐	☐

Anticipating Questions and Volunteering Proper Information

		YES	NO
		☐	☐
18.	Did you avoid giving all *yes* and *no* answers?	☐	☐
19.	Did you avoid criticisms of former employees or competitors?	☐	☐

ASSIGNMENT SHEET #5

		YES	NO
20.	Did you avoid talking about personal problems? (NOTE: The interviewer must be interested more in what you can contribute to the facility than what the business can do for you. Do not use a sob story about how desperate you are for a job.)		
21.	Did you show copies of your work if applicable?		
22.	Did you state that you are willing to start at the beginning salary?		
23.	Did you find a true, positive statement concerning your reasons for leaving previous jobs, even if you were fired? Examples: "I was laid off, but I learned from my mistakes." "I left because they did not need as many employees due to low patient census."		
24.	Did you try to mention your best qualities in relation to something concrete? Example: "I earned seventy-five percent of my expenses while going to school" is better than "I am a hard worker and want to get ahead"		
25.	Did you give the lead back to the interviewer if you found yourself talking too long, by saying, "Perhaps you have some other questions to ask me?"		
26.	Were you prepared for personal questions about your home life and your parents' occupations? (NOTE: Even though these kinds of questions are illegal, you may have to deal with them. Have a suitable answer ready.)		
27.	Did you avoid questions concerning politics or economics?		

ASSIGNMENT SHEET #5

		YES	NO
28.	Did you answer questions about career objectives using specific terms about what you would like to do in the near future in your particular field without limiting your opportunities? Example: A career in radiology that will lead to a specialty area. No locational preference		
29.	Did you look directly at the interviewer, smile, use correct English, and speak in clear moderate tones? (NOTE: Avoid swearing or using slang terms.)		
30.	Did you show an interest in the facility by asking questions about it?		
31.	Did you really try to sell yourself? (NOTE: Never refer to yourself as just average or fair. Always look for a positive response.)		
32.	Did you give the interviewer the opportunity to mention salary and fringe benefits? (NOTE: After you give the interviewer the opportunity, then you may ask about promotions, malpractice insurance, health insurance, discounts on health care, and uniform allowance if applicable.)		
33.	Did you remind the interviewer of the conversation topic if he/she is interrupted by a telephone call?		

Closing the Interview

		YES	NO
34.	Did you watch for signs that the interview was over, such as the interviewer shuffling papers and moving around in her/his chair?		
35.	Did you ask "May I say one thing more?" or "Would you be interested in...?" if the interview seemed to be ending before all important selling points had been made?		

ASSIGNMENT SHEET #5

	YES	NO
36. Did you thank the interviewer for his/her time and leave promptly?	☐	☐
Following-up the Interview 37. Did you write a thank-you letter, call, or visit again to express interest in the job and appreciation for the opportunity to interview?	☐	☐

(NOTE: EVEN IF THE INTERVIEWER DOES NOT OFFER THE POSITION, YOU SHOULD LEARN FROM EVERY SITUATION AND TRY TO IMPROVE YOUR INTERVIEWING TECHNIQUES.)

ASSIGNMENT SHEET #5

SAMPLE JOB INTERVIEW

(NOTE: Two students may rehearse this script and read it in front of the class to show how an interview might be conducted, or students may devise their own script for their occupational choice.)

A. = Applicant

I. = Interviewer

A. (Enters room, pauses, smiles, and approaches Ms. Hunt, whose hand is extended to shake hands.) Hello, Ms. Hunt, I'm Jon Couch and am applying for the job which you advertised in Sunday's Downtown News.

I. Hello, Mr. Couch. Won't you have a seat?

A. Thank you. I have a resumé which may be helpful to you. (Hands Ms. Hunt the resumé and sits down.)

I. This is a very well-prepared data sheet. Well, Jon, tell me about yourself.

A. I'm a senior at Downtown High School. I have been enrolled there in the health occupations program, which will qualify me to work as a health assistant. I am planning to work in the health field and enter radiology technology school soon.

I. Jon, have you had any work experience or are you currently working anywhere?

A. Yes. I worked at Forrest Hills Nursing Home last summer as an orderly. I did patient care and assisted with treatments supervised by the practical nurse.

I. What did you learn from the job at the nursing home?

A. The most important thing I learned was how to work with people. I find I enjoy giving care to people and learned much from the other staff workers.

I. Why do you want this job at Goodbody Hospital?

A. I feel there is more opportunity for me to learn about the medical professions and I could become better acquainted with hospital's routine and the radiology department.

I. When would you be able to start and what hours could you work?

A. I could work the 3-11 or 11-7 shift after I graduate from high school next month.

I. Are you aware of the dress code here at the hospital?

ASSIGNMENT SHEET #5

A. Yes, and I have white uniforms that were required at the nursing home that could be worn here at the hospital.

I. How much do you expect to earn?

A. I understand from some of the other health assistants that a person may begin with the minimum wage plus differential for the 3-11 or 11-7 shift.

I. That is right. Why don't you take this employee handbook with you and check out the pay scale and the fringe benefits.

A. Thank you.

I. Thank you for talking to us. We will let you know about the job soon.

A. (Stands) Thank you for your time, Ms. Hunt. Have a good day. (Shakes hands and leaves.)

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #6--EVALUATE A JOB OFFER

Imagine . . . your first job interview is minutes away. Countdown 5-4-3-2-1!

You enter the employer's office . . . Questions . . . Answers . . . You continue to feel nervous inside but appear cool outside . . . Questions . . . More Answers . . . The employer offers you the job!

Grab it? What a relief--no more job interviews! WAIT!!! Instead of saying *yes* or *no* on the spot to a job offer, express your gratitude in a warm and friendly manner, and then ask if you may have a day to consider the opportunity you have been offered. Few reputable employers will deny you reasonable time to be certain before agreeing to take a job.

After thoroughly researching the job, check each question you can answer in the list below.

THE JOB . . .

- ☐ Do I clearly understand the nature of the work and is it what I want to do? Is there a written job description? Are my responsibilities reflected in the job title?
- ☐ If this isn't my dream job, can it be a stepping stone as I acquire the skills and experience needed for advancement?
- ☐ Is the background I'm building so narrow that I will have difficulty transferring it to another employer?
- ☐ Will I be able to make any decisions affecting my work? Do I care?
- ☐ Will I need more training and will the company pay for it?
- ☐ Will overtime be necessary or available?
- ☐ Will I be able to leave all thought of the job behind at day's end? If not, do I care?
- ☐ Will I travel or relocate?
- ☐ Will I be proud to tell my friends what I do?
- ☐ Is the job permanent or temporary?
- ☐ If permanent, is there reasonable job security?
- ☐ Does this job require union membership?

ASSIGNMENT SHEET #6

THE FACILITY . . .

- ☐ Is the facility too large, impersonal, and rule oriented for my personality?
- ☐ Is the facility too small to offer room for advancement or impressive credentials for a future resumé?
- ☐ Does the facility have a healthy financial position and is it a growing organization?
- ☐ Is there a high turnover of personnel, and if so, why?
- ☐ Does the facility promote from within the ranks or turn to outsiders to fill supervisory jobs?
- ☐ Have I met the person who would be my immediate supervisor?
- ☐ Does the supervisor seem like the sort of person with whom I could get along?
- ☐ Do co-workers appear to be my kind of people?
- ☐ Is the facility's location convenient?
- ☐ Is the physical setting adequate?

  Examples: Light, ventilation, cleanliness
- ☐ What is the facility's reputation for fair treatment of employees?
- ☐ Is a written personnel statement available that covers vacations, sick leave, cause for dismissal, and so forth?

FINANCIAL REWARDS . . .

- ☐ Do the earnings meet my minimum needs? Are there automatic cost-of-living increases?
- ☐ What is the method of payment: salary, hourly wage, commission, wage and tips, by the piece, or fee?
- ☐ Are raises based on merit, length of service, or formal exams?
- ☐ Does the facility offer profit sharing to employees?
- ☐ What fringe benefits are given: health insurance, free parking, discount privileges, malpractice insurance, uniform allowance, and others?

WHEN TO SAY NO . . . Should you always turn down an offer that doesn't measure up?

That depends on several questions. How desperately do you need to earn money? How competitive is the field you hope to enter, and would it be best to get your foot in the door any way you can? How valuable is the experience you'll gain? There are times when it is wise to accept a job which is not perfect in your eyes.

ASSIGNMENT SHEET #6

On the other hand . . . if both your logical thinking and gut feeling are bad, it may be best to say thanks but no thanks, and look elsewhere.

Adapted from "If Things Don't Shape Up, I May Not Take the Job." Career World, February, 1977.

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #7--WRITE A FOLLOW-UP LETTER

1. Write a follow-up letter thanking the employer for the interview. Use any form you wish or follow the format of the sample follow-up letter on the following page.

2. Make sure your letter meets the following standards.

   a. Typed or written perfectly

   b. Clean, neat, and attractively arranged on the paper

   c. Free from spelling, punctuation, and grammatical errors

   d. Sent within a day or two after the interview

3. Include the following points in your follow-up letter.

   a. Expression of appreciation for interviewer's time and interest

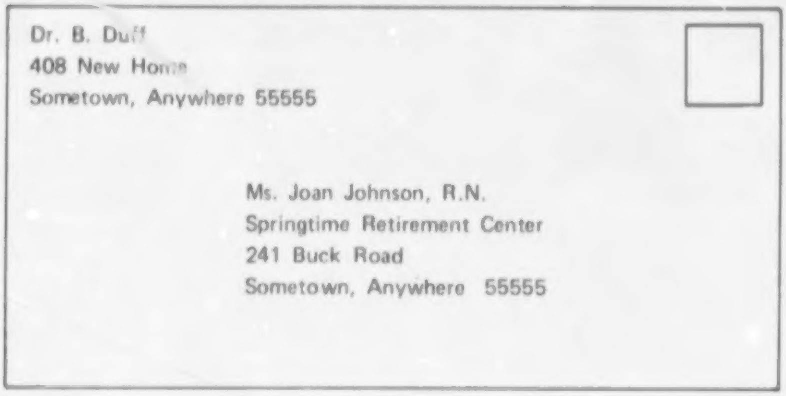
   b. Summary of your qualifications and interest in that position

   c. Your name, address, and phone number (to make it easier for your employer to contact you)

4. Make this last bid for the job a prime example of your excellent work habits. Make the letter as clean, neat, and well-worded as you possibly can.

5. Address a legal-sized envelope (Figure 1)

FIGURE 1



Dr. B. Duff
408 New Home
Sometown, Anywhere 55555

Ms. Joan Johnson, R.N.
Springtime Retirement Center
241 Buck Road
Sometown, Anywhere 55555

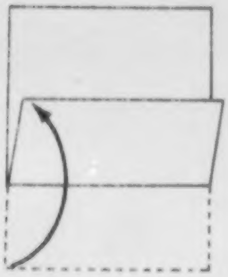
(NOTE: Be sure and type the address EXACTLY the same as the inside address of the letter.)

ASSIGNMENT SHEET #7

6. Fold letter

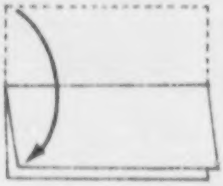
   a. Fold slightly less than one-third of the letter toward the top (Figure 2)

FIGURE 2



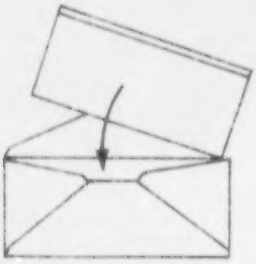
   b. Fold down the top of the letter to within 1 cm (1/2") of the bottom fold (Figure 3)

FIGURE 3



7. Insert the letter into the envelope with the first crease toward the bottom of the envelope (Figure 4)

FIGURE 4



ASSIGNMENT SHEET #7

SAMPLE FOLLOW-UP LETTER

623 Merry Street
Anytown, Oklahoma 74023
July 29, 1978

Ms. Terry Vancover, Director of Nursing
Parklawn Nursing Center
549 N. 10th Street
Anytown, Oklahoma 74023

Dear Ms. Vancover:

Thank you for interviewing me for the job in the dietary department of your nursing center. Working at Parklawn would be a good learning experience and give me the opportunity to learn about the field of dietetics. I hope that you will give me the opportunity to prove my worth.

The application form you gave me is enclosed.

I will be available for work August 1, 1978. You may call me at my home after 4:00 P.M. My telephone number is 367-9308.

Sincerely yours,

Jan Hutchins

Jan Hutchins

Enclosure

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #8--COMPARE JOB OPPORTUNITIES

When you are offered a job or are changing jobs, there are many factors to weigh before taking the position. Some of these include:

- What is your take-home pay?
- What are the benefits which accompany the job?
- How much will it cost to actually be at work each day?
- Would the job be satisfying to you?
- How would the job meet your needs and aspirations?

WHAT'S MY TAKE-HOME PAY?

Salaries and wages are often quoted by employers as gross earnings. Gross earnings are used because tax deductions vary due to the number of dependents, the amount of earnings, and other information.

Optional benefits and deductions offered by an employer also differ. It is generally advisable to ask what programs are available for enrollment as these can affect the actual money you receive on pay day.

WHAT OTHER BENEFITS DO I GET FROM THIS JOB?

Some benefits associated with working are not always visible. Often some of these overlooked benefits are paid for in part by your employer. At the time of the interview or when considering a position ask about them.

Employer's contributions for your protection which may include:

- Health insurance
- Malpractice insurance
- Profit sharing
- Credit union
- Unemployment compensation
- Worker's clothing and safety garments
- Medical facilities and health tests
- Pensions

ASSIGNMENT SHEET #8

- Travel insurance (covering mishaps when traveling on business)
- Education programs or reimbursement for courses related to job
- Sick leave with pay
- Paid vacations and holidays
- Discount privileges, such as discounts on merchandise or services related to the job

WHAT WILL IT COST TO WORK AT THIS JOB?

Frequently we often overlook the costs which are associated with being employed. It may be of value to calculate estimated weekly expenses before you make a decision about a job.

Estimate weekly expenses for:

Transportation	$______	Gifts for other employees	$______
Lunches (or cost of food eaten away from home, including soft drinks and coffee)	$______	Special materials, uniforms, or equipment for the job	$______
Clothing (including cleaning)	$______	Other	$______
Child care for working parent	$______	TOTAL:	$______

WHAT'S IMPORTANT TO YOU IN A JOB?

Take-home pay and benefits may be only part of what you want from a job. Think through what other things you consider important in a job.

What are some of the most rewarding things you've felt about any job you've ever done?

1. ____
2. ____
3. ____

How might you rate these in order of what's important to you?

_____ Job security (little chance you'll be released from the job)

_____ Opportunity for advancement

_____ Recognition for your work

ASSIGNMENT SHEET #8

_____ Good wages

_____ Opportunity to learn and use your ideas

_____ Flexible working hours and long vacations

_____ Pleasant working conditions

_____ Interesting work

_____ Friendly co-workers

_____ Other, such as ______________________________

ARE YOU READY TO DECIDE???

Now try to take all the information you have gathered and summarize it below to reach a decision about whether you want the job or not.

1. Would the job be satisfying to you? Why or why not?

____

____

____

2. What are the benefits which accompany the job?

____

____

____

3. How much will it cost to actually be at work each day?

____

____

____

4. How would the job meet your needs and aspirations?

____

____

____

5. I estimate my take-home pay to be $__________.

6. I estimate my expenses related to working to be $__________.

ASSIGNMENT SHEET #8

7. I would most enjoy ____

____

____

about this job.

8. I estimate my job benefits to be worth $__________.

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #9--ASK FOR A RAISE

Asking for a raise . . . the ideal situation exists when true merit is recognized and never needs to be called to the employer's attention. If your situation is not ideal, what can you do? Obviously, there is only one answer: you must bring the matter up; you must ask for a raise.

Use the guidelines below to role play asking for a raise with another student or a resource person provided by your teacher.

1. BEFORE YOU SPEAK AT ALL, PRECEDE YOUR REQUEST WITH CONSIDERABLE THOUGHT AND STUDY.

2. Determine if you are justified in asking for a promotion or a raise by making out a good case for yourself in writing. BE OBJECTIVE!!!

   Examples: What about your production?

   Is there a standard for your work in your office?

   If so, how does your production compare with this standard?

   How many mailable letters do you transcribe in an hour?

   How many clients or callers have you handled without a complaint?

   What additional preparation have you made since you were hired?

   If you were to take an employment test at this point, would you do significantly better than on the one you took when you applied for your job?

3. Check your attitudes and work habits.

   Examples: Are you always prompt in arriving for work?

   Do you work overtime without complaint when it is necessary?

   How many days of work have you missed because of illness?

   Are you considered cooperative by your supervisors and your co-workers?

   When you finish the work assigned, do you find something else to do?

ASSIGNMENT SHEET #9

4. Ask your employer for an appointment.

5. Bring your notes with you to your interview.

6. Explain the progress.

   Example: "_______________, I have enjoyed my work here very much. You may be interested in the progress I have made since I was hired two years ago."

   (NOTE: If you are confident of your worth, you will be able to respond pleasantly to any gruffness or lack of enthusiasm on your employer's part. If the employer challenges your statements, see that you neither back down nor become defensive. Simply and calmly bring up the case that you have prepared. After all, it is merely another employment interview, and you passed the first one.)

7. Thank your employer for the interview and for the time spent.

8. Leave.

   (NOTE: Go back to your work and be patient. Even if your employer has seemed impressed with your facts, you must not expect your raise to be forthcoming at once. The employer may intend to grant your request after conferring with other members of the firm. DON'T RUIN A GOOD CASE BY BECOMING A NUISANCE.)

9. Ask your employer if any decision has been made after two weeks.

   (NOTE: KEEP YOUR TONE FRIENDLY BUT IMPERSONAL. TOO MUCH EMOTION HAS RUINED MORE THAN ONE GOOD CAUSE. Even though you may be worthy of a raise, circumstances, such as budget, may prevent your employer from giving you a raise.)

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #10-WRITE A LETTER OF RESIGNATION

It is not unusual for a person to change jobs a number of times before she/he finds a position regarded as permanent. Part of total career success involves notifying your present employer of your departure in a positive way. How do you leave with a good impression?

Sometimes a letter is necessary because of the distance involved or the difficulty of arranging an interview with the proper supervisor. If notice can be given in person, you should do so. It is a forthright, open-handed and natural method. It usually takes little time, but it affords the opportunity for a discussion which could lead to improved understanding, if not other advantages.

A good letter of resignation, including one that merely confirms a conversation, has many possible advantages. Written in a spirit of friendliness and cooperation, it can be a valuable addition to your personnel file. Later on, if supplying a recommendation, a supervisor may wish to see your file to refresh his/her memory about you. Your "exit" letter will show that you apparently left on friendly terms and gave notice in writing. Under the principle of "all's well that ends well," the letter may cause a better recommendation than would otherwise be written. It can also provide a favorable climate for you to rejoin the institution, if unforeseen events bring you back to the door.

Use the guidelines below and the sample letter to write a letter of resignation.

1. Address the letter to the nearest supervisor or department head above you.

2. Imply that your departure will be taken as an inconvenience.

3. Begin with a statement that will be of interest and will appeal to your reader.

   Examples: Show appreciation for the months/years of employment under this institutions management.

   Acknowledge the confidence placed in you by various advancements.

   Comment on the rewarding experience you have acquired under their direction.

   (NOTE: The purpose of this is to place your reader in a relaxed frame of mind so that she/he will be receptive to the message to follow.)

4. Give positive reasons for going to the new job; avoid negative reasons for leaving the job.

ASSIGNMENT SHEET #10

5. Mention the name of the new employer and the position you are to fill.

6. Give an appropriate time notice.

   (NOTE: This time interval should be reasonable enough to allow the company to get a suitable replacement. There is no set time that can be quoted, sometimes a month, sometimes an even longer period of time. Usually the higher you are in the organization, the more likely it is that you should give notice of a month or more.)

7. End on a constructive or encouraging note.

   Examples: Request a personal interview to explain in greater detail.

   Offer to extend the departure date, if possible, while a replacement is being found.

   Suggest a possible replacement if that is not presumptuous.

   Simply offer to be available to help in the transition as you are needed.

ASSIGNMENT SHEET #10

SAMPLE RESIGNATION LETTER

May 3, 1978

Jim Kling, Medical Technology Lab Director
Pathology Laboratories, Inc.
1022 Kline
Metropolitan, Ohio 17900

Dear Mr. Kling:

Two weeks ago I had no idea that I might be writing you this letter. My two years here at the Pathology Laboratory has been a rewarding learning experience. All the guidance and educational opportunities given to me are appreciated.

Last week, however, I received a job opportunity which is too good to pass up. Great Things Memorial Hospital in my home town of Progress has offered me the job as Department Head of the new Medical Laboratory Research Department. I will be able to go back to the university for special courses in research and it will be a challenge to set up the new laboratory.

I have decided to accept the offer and will be moving to Progress July 6, 1978. This will give you time to find someone to be trained for my position.

If there is anything to be done the next few weeks to help the office prepare for my departure, I shall be happy to be of service.

Respectfully yours,

Frances Whitten

Frances Whitten
Medical Laboratory Technician

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #11--EVALUATE PERSONAL HABITS ASSOCIATED WITH CAREER SUCCESS

Good habits are necessary in order to establish good human relations and a good relationship with co-workers, employer, and clients. Complete the evaluation below and then answer the questions that follow.

(NOTE: If you have not yet been employed, base your evaluation on "work situations" in classroom situations.)

WORKING WITH CO-WORKERS (OR STUDENTS)

	YES	NO
Do you do your own work and not leave it for someone else to do?		
Do you clean up after yourself?		
Are you willing to learn from others about how to do a job better?		
Do you contribute to morale and team spirit at place of business?		
Do you learn names of people with whom you work as soon as possible?		
Do you take a sincere interest in co-workers, their families, and their interests?		
Are you a good listener?		
Do you admit mistakes without making excuses?		
Do you assume blame for things that are your fault?		
Do you avoid gossip?		
Do you support co-workers?		

WORKING WITH EMPLOYER (OR TEACHER)

	YES	NO
Are you cheerful?		
Do you feel your job is a privilege, not a right?		
Do you try always to do the best you can?		

ASSIGNMENT SHEET #11

	YES	NO
Do you know your job?		
Are you on the job unless excused?		
Are you on time and ready to work? (NOTE: Do a day's work for a day's pay!)		
Do you try to avoid waste of all kinds of material, time equipment?		
Do you look for a better way to do the job?		
Do you tell the truth and are you sincere?		
Do you ask questions when you need help?		
Do you try to see employer's side when there is a problem?		
WORKING FOR CLIENTS Do you know what is expected of you and do you do your job well?		
Do you give professional treatment to clients?		
Do you keep promises made to clients?		
Are you polite to clients?		
Do you recognize clients as buyers of your service and give them their money's worth?		
Are you sincere?		
Do you smile?		
Are you friendly, interested, and sympathetic?		
Do you gain the client's confidence and listen?		
Do you try not to rush the clients?		
Do you avoid arguing with an angry client?		
Do you avoid comments that might upset a client?		
Do you refer matters you cannot handle to supervisor?		

ASSIGNMENT SHEET #11

	YES	NO
Do you treat each client as an individual?		
Do you take pride in winning a client's friendship?		

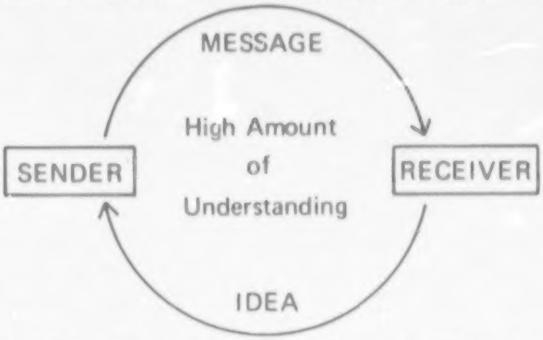
1. What do you feel are your strengths in personal habits associated with job success?

2. What do you feel are your weaknesses in personal habits associated with job success?

CAREER SUCCESS
UNIT II

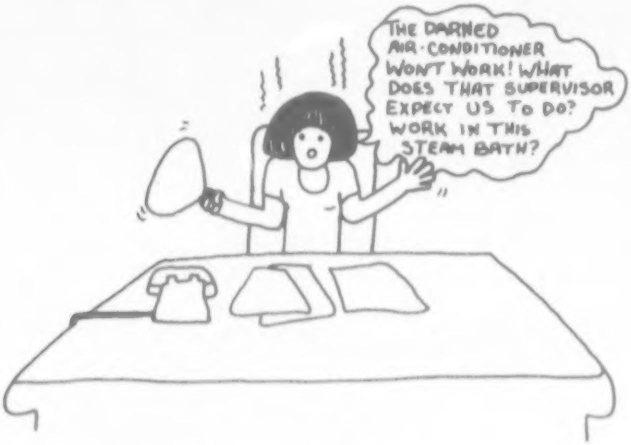
ASSIGNMENT SHEET #12--IMPROVE LISTENING SKILLS

Communication is the sharing of a message or an idea which results in a high amount of understanding between the sender and the receiver of the message.



SHARING AND UNDERSTANDING ARE THE KEY WORDS!!! MEANINGS ARE IN PEOPLE, NOT IN WORDS.

Listening is one key to effective communication! Effective listening requires two skills: the ability to listen for facts and the ability to listen for feelings. Listening for facts comes more naturally than listening for feelings!


THE DARNED AIR-CONDITIONER WON'T WORK! WHAT DOES THAT SUPERVISOR EXPECT US TO DO? WORK IN THIS STEAM BATH?

1. What are the facts in the above message?

ASSIGNMENT SHEET #12

2. What are the feelings in the above message?

(NOTE: When a person's expressed feelings are ignored the first time around, that person will usually make a second attempt to express her/his feelings! LISTEN!!!)

This activity will give you practice in listening for feelings as well as for facts. Remember that most people can get the facts in a message. It is more difficult to listen for feelings. However, the true message lies in the combination of both the facts and feelings.

Four students--two pro and two con--should debate the following statement: Capital punishment reduces the crime rate. Listen to the argument and then answer the following questions.

1. What problems come up when the opposing side forgets to listen for feelings?

2. Why is it difficult to get agreement on value statements?

3. How often did the opposing side mistake feelings for fact?

4. Why is it more difficult to find proof for value statements than for statements of fact?

ASSIGNMENT SHEET #12

5. What communication barriers arise when false opinions and feelings get in the way of listening?

6. Did the audience let their own sentiments and attitudes affect the way they heard the argument?

Adapted from *Human Relations in Business*. Dallas: South-Western Publishing Co., 1977.

CAREER SUCCESS
UNIT II

ASSIGNMENT SHEET #13--INTERVIEW AN EMPLOYER

Part of career success focuses on getting along with and establishing a positive relationship with employer(s). EMPLOYERS ARE HUMAN!!! This activity will provide an opportunity for you to find out "first-hand." Arrange to interview an employer in your community. This interview can help you to get to know an employer and get you started toward good human relations with the employers.

To help you get going, a list of questions you might ask the employer is given below. In the spaces provided, jot down the answers given to you during the interview.

1. How long have you been an employer?

   ____

2. How many employees do you oversee?

   ____

3. Do you like your job? Why?

   ____

   ____

4. Does your work sometimes make you irritable or upset? Why?

   ____

   ____

5. What kind of employee do you get along with best?

   ____

   ____

   ____

   ____

6. What are your hobbies?

   ____

   ____

ASSIGNMENT SHEET #13

7. What is the best part of your job?

____

8. If you could start over, would you go into the same kind of work again, or what would you like to do?

____

____

____

____

9. What type of training or education do you have for this job?

____

____

____

10. How would you feel about your child going into your kind of work?

____

____

____

CAREER SUCCESS
UNIT II

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with career success with their correct definitions by placing the appropriate numbers in the blanks provided.

______a. Advertisement telling what kind of job is available and what qualifications are required

______b. Organized to aid health workers in finding employment in hospitals, in nursing homes, and for homebound people in staffing and supplying medical care

______c. Printed form on which job applicant records information about her/his personal history, job history, job experience, education, and references

______d. Written statement or summary of information about an individual that would be of interest to a prospective employer; may also be referred to as a personal data sheet

______e. Business designed to help individuals find employment

______f. Code or standard of behavior; professional conduct

______g. Feelings about people, things, and ideas

______h. Classified advertising that does not identify the advertiser

______i. Action that is acquired and has become automatic; tendency to perform a certain action

______j. Meeting of prospective employer and job applicant for evaluation and questioning

1. Application form
2. Employment agency
3. Medical personnel services
4. Habit
5. Attitude
6. Resume'
7. Blind ad
8. Help wanted ad
9. Ethics
10. Interview

______k. Continuous process of getting along with people

______l. Classified advertisement placed by individual seeking employment indicating the job seeker's qualifications

______m. Information about a job and skills needed to adequately perform a job

______n. On-going alertness for any new knowledge or training

______o. Sharing of a message or idea which results in a high amount of understanding between the sender and the receiver of the message

______p. Activities designed for technical development and worker improvement; may be in the form of demonstration, meetings, or short conferences

______q. Policy that covers health worker in case of accident or injury to person receiving care

______r. Entire salary without any deductions

______s. Salary after deductions

11. Employment/situation wanted ad
12. Learning attitude
13. Malpractice insurance
14. Communication
15. Technical knowledge
16. Job enrichment programs
17. Human relations
18. Gross earnings
19. Net earnings

2. Arrange in order steps to take in finding and securing a job by placing a "1" for the first step, a "2" for the second step, and so on.

______a. Estimate salary

______b. Write down a list of possible contacts to help you in your job search

______c. Write down a complete self-inventory

______d. Prepare for a job interview

______e. Write down a list of employer possibilities

3. Name sources for locating employment opportunities.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

g. ____________________

h. ____________________

4. Distinguish among operations of employment services by placing a "PR" for private agency operations, a "PU" for public agency operations, and an "HCS" for health care service operations in the appropriate blanks. There may be more than one correct answer for each blank.

_____a. Do not charge placement fee for services

_____b. Controlled by state laws

_____c. Give helpful aptitude tests and counseling, if needed

_____d. Allow worker to choose work hours and specialty area

_____e. Provide full or part-time work placement

_____f. Pay health workers daily in some cases

_____g. Collect fee when employment is secured

_____h. Supported by state or federal government funds

_____i. Provide in-service education training, if needed

_____j. Charge placement fee for services

_____k. Cover health worker with malpractice insurance

_____l. May pay Social Security and worker's compensation insurance

_____m. Request signed contract between you and agency

5. Select from the list below guidelines for dressing for an interview by placing an "X" in the appropriate blanks.

_____a. Consider kind of job

_____b. Wear high fashion clothes

_____c. Dress to fit salary range above the one in which you expect to be employed

_____d. Consider age of the interviewer

_____e. Wear heavy scented fragrances

_____f. Dress attractively to get interviewer's attention

_____g. Be well-groomed

_____h. Wear appropriate undergarments

6. Name five job training sources.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

7. Discuss ways to increase self-satisfaction in a career.

____

____

____

____

8. Select from the list below reasons why people lose jobs by placing an "X" in the appropriate blanks.

_____a. Low dedication to work ethic

_____b. Being assertive and making suggestions

_____c. Awareness of job limitation

_____d. Poor human relations and attitude

_____e. Lack of technical knowledge

_____f. Willingness to improve skills

9. Prepare a resumé.

10. Write a cover/application letter.

11. Complete an employment application letter form.

12. Use telephone to arrange a job interview.

13. Participate in a job interview.

14. Evaluate a job offer.

15. Write a follow-up letter.

16. Compare job opportunities.

17. Ask for a raise.

18. Write a letter of resignation.
19. Evaluate personal habits associated with career success.
20. Improve listening skills.
21. Interview an employer.

(NOTE: If activities 9-21 have not been accomplished prior to the test, ask the instructor when they should be completed.)

CAREER SUCCESS
UNIT II

ANSWERS TO TEST

1. a. 8

b. 3

c. 1

d. 6

e. 2

f. 9

g. 5

h. 7

i. 4

j. 10

k. 17

l. 11

m. 15

n. 12

o. 14

p. 16

q. 13

r. 18

s. 19

2. a. 5

b. 3

c. 1

d. 4

e. 2

3. a. People

b. Newspapers

c. Employment agencies

d. Health care services

e. Former employers

f. Personnel offices of health facilities

g. School placement services

h. Professional journals and newsletters

4. a. PU, HCS

b. PR

c. PU

d. HCS

e. HCS

f. HCS

g. PR

h. PU

i. HCS

j. PR

k. HCS

l. HCS

m. PR

5. a, d, g
6. Any five of the following:
   a. On-the-job training
   b. Extension courses
   c. Correspondence and TV courses
   d. Community and junior colleges
   e. Area vocational schools
   f. Specialized military training
   g. Special schools
   h. Apprenticeship programs
7. Discussion should include:
   a. Have a positive attitude
   b. Be enthusiastic
   c. Keep an open mind
   d. Read all of the journals, newsletters, and textbooks available that pertain to your profession
   e. Join and be active in your professional organizations
   f. Volunteer to attend any workshops or in-service programs that your institution might offer
8. a, d, e
9. Evaluated to the satisfaction of the instructor
10. Evaluated to the satisfaction of the instructor
11. Evaluated to the satisfaction of the instructor
12. Evaluated to the satisfaction of the instructor
13. Evaluated to the satisfaction of the instructor
14. Evaluated to the satisfaction of the instructor
15. Evaluated to the satisfaction of the instructor
16. Evaluated to the satisfaction of the instructor
17. Evaluated to the satisfaction of the instructor

18. Evaluated to the satisfaction of the instructor

19. Evaluated to the satisfaction of the instructor

20. Evaluated to the satisfaction of the instructor

21. Evaluated to the satisfaction of the instructor

HOSA
UNIT III

UNIT OBJECTIVE

After completion of this unit, the student should be able to select from a list benefits of being a HOSA member, match historical dates to important HOSA events, name the official colors of HOSA, and match chapter officers to their duties. The student should also be able to recite the Oklahoma Association of HOSA creed and evaluate the effectiveness of parliamentary procedure. This knowledge will be evidenced through completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with HOSA to their correct definitions.
2. Select from a list benefits of membership in HOSA.
3. Match historical dates to important Oklahoma Association of HOSA events.
4. Match historical dates to important HOSA events.
5. Select from a list purposes of the HOSA organization.
6. Select from a list other student vocational organizations.
7. Write the HOSA motto.
8. Name the official HOSA colors.
9. Describe the official HOSA dress code for members.
10. Identify the colors of the official HOSA emblem.
11. Name the organizational levels of HOSA.
12. Match chapter officers to their duties.
13. Name essentials of a good chapter.
14. Select from a list criteria for selection of voting delegates.
15. Name types of chapter activities.
16. Complete a chart showing leadership training activities for HOSA.
17. Select from a list principles upon which parliamentary procedure is based.

18. Arrange in order the sequence of business carried out during a HOSA meeting.

19. Name characteristics of a good chairperson.

20. Evaluate chapter meeting.

21. Recite the Oklahoma Association of HOSA creed.

22. Evaluate the effectiveness of parliamentary procedure.

HOSA
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and assignment sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Invite alumni members to speak to class about the benefits and rewards of being involved in HOSA.

   G. Review last year's scrapbook of activities, illustrating how students can get involved, learn, achieve, and be rewarded through involvement.

   H. Develop a local slide program involving students from your school. Show the different activities offered and change it from year to year to involve current students.

   I. Make a bulletin board for the first day of school to show benefits of belonging to HOSA.

   J. Visit other vocational organizations with students to observe activities.

   K. Visit a civic club with two or three students and let them present information about the HOSA organization.

   L. Invite other HOSA chapters to installations and meetings.

   M. Invite resource people to speak about their career field or professional involvement in organizations.

   N. Set up a simulated parliamentary procedure for the students to practice technique.

   O. Encourage attendance at leadership training conferences and sponsor students on trips to meetings.

   P. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

C. Transparency master: TM 1--HOSA Emblem

D. Assignment sheets

1. Assignment Sheet #1--Color Me HOSA

2. Assignment Sheet #2--Evaluate Chapter Meeting

3. Assignment Sheet #3--Recite the Oklahoma Association of HOSA Creed

4. Assignment Sheet #4--Evaluate the Effectiveness of Parliamentary Procedure

E. Test

F. Answers to test

III. Unit references:

A. *Oklahoma Health Occupations Student Organization Handbook*. Stillwater: Oklahoma State Department of Vocational and Technical Education, 1974.

B. Vocational Industrial Clubs of America. *Official Guide*. Washington, D.C.: Vocational Industrial Clubs of America, Inc., n.d.

C. *DECA Handbook*. 7th ed. Falls Church, Virginia: Distributive Education Clubs of America, 1972.

D. *Official FFA Manual*. Alexandria, Virginia: Future Farmers of America, 1977.

IV. Films:

(NOTE: These films are available only to Oklahoma teachers from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 W. Sixth Street, Stillwater, OK 74074. Out-of-state teachers may purchase the films from the addresses below.)

A. "You Pack Your Own Chute." Ramic Productions, 58 West 58th Street, New York, NY 10019.

B. "Mr. Chairman." Available from Encyclopedia Britannica, 425 N. Michigan Avenue, Chicago, IL 60601.

C. "Agriculture's New Generation." Available from Venard Films, Box 1332, Peoria, IL 61601.

HOSA
UNIT III

INFORMATION SHEET

I. Terms and definitions associated with HOSA

A. HOSA (Health Occupations Students of America)--Student organization at the national level for students enrolled in health occupations programs

(NOTE: The state organization is known as the Oklahoma Association of HOSA.)

B. State HOSA advisor--Person appointed by the state supervisor and approved by executive council to advise and provide leadership for the state organization

C. Local chapter advisor(s)--Person(s) designated by local school administration to advise and provide leadership for the local HOSA chapter

D. Voting delegate--Student chosen to represent local chapter in balloting on questions of business or election of officers at state or national conferences

E. Active member--Student enrolled in an approved health occupations educational program; must be member of the state organization in order to hold offices on the local, state, and national levels

(NOTE: The two divisions of active members are secondary and full-time adult.)

F. Alumni member--Former active member who has remained in good standing with the chapter

G. Honorary life member--Individual who has made contributions to development of HOSA in Oklahoma and whose membership has been approved by the state executive council

(NOTE: Alumni and honorary life members have all rights except serving as voting delegates, holding elective office, or participating in state contests.)

H. Professional member--Person who may be associated with, or who has participated in, the development of health occupations student organizations in Oklahoma as approved by the state organization

I. Parliamentary procedure--Set of rules for conducting a meeting in an organized and efficient manner

(NOTE: Knowledge of these techniques is essential to leadership development and vital to success of any organization. The official handbook for parliamentary procedure is the newly revised *Robert's Rules of Order*.)

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INFORMATION SHEET

J. Motion--Proposal that something be done; method of bringing a question before the assembly for consideration

K. Main motion--Introduces business or brings a question directly before the assembly

(NOTE: A main motion is introduced by saying, "I move that. . . ." Only one main motion can be considered at a time.)

L. Subsidiary motion--Modifies or disposes of main motion; must be voted upon before vote is taken on main action

Example: Amendment

M. Privileged motion--Motion that has no connection with main motion and outranks other motions

Example: Fixing time of next meeting, adjourning, calling for question of privilege, or calling for order of the day

N. Incidental motion--Motion that arises or relates to procedure and may not refer directly to the main question

Examples: Nominations and elections, objection to consideration, or points of order

O. Opening ceremony--Set formal routine that is used at the beginning of each meeting

P. Closing ceremony--Set formal routine that is used at the end of each meeting

II. Benefits of membership in HOSA

A. Provides guidance to students who seek to develop knowledge, skills, and behavioral characteristics necessary in preparing for a future in a health career

B. Helps students gain self-confidence through the development of leadership skills and abilities

C. Helps students associate and exchange information with other students who have the same interests

D. Introduces students to a wide variety of health career choices

E. Helps students develop responsibility through service to the local community

F. Provides students with the opportunity to make realistic career choices

INFORMATION SHEET

III. Historical dates of important Oklahoma Association of HOSA events

A. August, 1973--Survey of interested health occupations instructors was taken to decide if a new organization should be formed for students in health occupations programs

B. May 30-31, 1974--Steering committee composed of teachers and state staff members was appointed and met for two days to investigate and make recommendations for the new organization; plans were made for the first chapters to be formed in September

C. Fall, 1974--Meeting was held to elect state officers for the new health occupations student organization; officers were later installed and a name, colors, motto creed, and emblem were selected

D. April, 1975--First state conference was held in Tulsa, Oklahoma for leadership training and skills contests

E. Spring, 1976--Conference held in Tulsa, Oklahoma; included new adult chapters from practical nursing programs

F. Fall, 1976--Conference held in Oklahoma City, Oklahoma; adult and secondary officers were elected and installed

IV. Historical dates and important HOSA events

A. November, 1975--Oklahoma was one of six original charter states involved in the organization of a national health occupations education student organization in Cherry Hill, New Jersey

B. November, 1976--American Health Occupations Education Student Organization Constitutional Convention was held in Arlington, Texas; national by-laws were adopted and national officers were elected and installed; colors and the name, Health Occupations Students of America, were adopted

C. April, 1978--First annual convention of HOSA was held in Oklahoma City, Oklahoma to select national uniform, motto, and emblem; to provide leadership training; and to involve students in skills contests

V. Purposes of the HOSA organization

A. To develop programs and activities which will develop physical, mental, and social well-being of the individual and produce qualities of leadership, character, good citizenship, and respect for ethical practices

B. To develop self-actualization of each member which will contribute to meeting the individual's psychological, social, and economic needs

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INFORMATION SHEET

C. To build students' confidence in themselves and their work by teaching them to assume responsibilities and develop occupational competencies and social skills

D. To promote interorganizational relationships with professional groups, businesses, industries, and other student organizations

E. To recognize individual achievement in scholarship, occupational skills, or services rendered by providing awards

F. To promote involvement in current health care issues, environmental concerns, and survival needs of the community, the nation, and the world

G. To promote establishment of local Oklahoma Association of HOSA

VI. Other student vocational organizations

A. DECA (Distributive Education Clubs of America)

B. FHA-HERO (Future Homemakers of America-Home Economics Related Occupations)

C. FFA (Future Farmers of America)

D. VICA (Vocational Industrial Clubs of America)

E. FBLA (Future Business Leaders of America)

F. AIASA (American Industrial Arts Student Association)

VII. HOSA motto--The hands of youth mold the health of tomorrow

VIII. Official HOSA colors (Assignment Sheet #1)

A. Hospital white

B. Navy blue

C. Maroon accent

IX. Official HOSA dress code for members (Assignment Sheet #1)

A. Female

1. Navy blue blazer
2. White or navy blue pants or skirt
3. Maroon scarf with white HOSA imprint
4. Plain, tailored white shirt with winged collar

INFORMATION SHEET

B. Male

1. Navy blue blazer
2. White or navy blue pants
3. Maroon tie with white HOSA imprint
4. Plain, tailored white shirt

X. Colors of the official HOSA emblem (Transparency 1)

A. Background--White

B. HEALTH OCCUPATIONS OF AMERICA and FOUNDED IN 1976--Maroon

C. HOSA, lines, and artwork--Blue

XI. Organizational levels of HOSA

A. Local chapters

(NOTE: Finances needed to operate the local chapters will depend upon programs planned for the year.)

B. State Oklahoma Association of HOSA

(NOTE: State organization finances are provided through dues from members.)

C. National HOSA

(NOTE: National organization finances are provided through yearly dues.)

XII. Chapter officers and their duties

A. President--Presides over all chapter meetings; serves as ex officio member on all committee meetings; coordinates and supervises all efforts of chapter officers and committees

B. Vice-president--Assists the president; presides over chapter activities in the absence of the president; serves as chairperson of program committee

C. Secretary--Prepares and reads minutes of all chapter meetings; maintains membership list and record of attendance; answers all chapter correspondence promptly; counts and records all votes; reads all communications at meetings; prepares an agenda for meetings

D. Treasurer--Keeps financial records of the chapter

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INFORMATION SHEET

E. Sentinel--Sets up and secures meeting rooms; attends the door during meetings and greets visitors; makes sure meeting room is comfortable; secures the meeting without interruption

F. Parliamentarian--Informs all members on correct parliamentary procedures

G. Reporter--Prepares news releases regarding HOSA activities for all media

H. Historian--Gathers and assembles all materials in preparation for the chapter scrapbook

I. Chaplain--Takes charge of all religious activities during chapter meetings and banquets

XIII. Essentials of a good chapter

A. Capable officers and leaders

B. Responsibility for chapter activities shared by all members

C. Challenging program of activities

D. Proper recordkeeping

E. Well-planned, regularly held chapter meetings

F. Support from school officials and community leaders

G. Active member participation in chapter activities

XIV. Criteria for selection of voting delegates

A. Active participation in all chapter meetings and assigned committees

(NOTE: This person should demonstrate leadership abilities.)

B. Successful achievement in classroom assignments and laboratory activities while maintaining achievement in other school subjects

(NOTE: Each chapter is entitled to be represented by two voting delegates.)

XV. Types of chapter activities

(NOTE: Activities promote growth of individual members; improve school, home, and community; and serve as showcases for the local chapter, the national organization, and vocational education.)

A. Professional activities

Examples: Guest speakers, vocational-related films, chapter field trips, special recognition banquets, state and national conferences, and competitive events

INFORMATION SHEET

B. Civic activities

Examples: Benefits for March of Dimes, Heart Fund, Community Chest, Red Cross, or other service agencies; booths and exhibits at state fairs; and assisting community officials with health projects

C. Service activities

Examples: Thanksgiving or Christmas food baskets for people in need; involvement with senior citizen groups

D. Social activities

Examples: Get-togethers for prospective members, reception for faculty members, and chapter picnics or dances

E. Fund-raising activities

Examples: Sales projects, car washes, bake sales, dinners

(NOTE: Local chapters can finance their group through fund-raising events but these must be approved by school administration.)

XVI. Leadership training activities for HOSA

	Meetings	*Activities and participants*
A.	Vocational Leadership Institute (STATE) (NOTE: Since HOSA does not elect its state officers until fall, each chapter advisor is asked to submit names of potential leaders in HOSA, students who will be members of a HOSA chapter next year and would be willing to run for office.)	Each summer state officers of vocational student organizations attend a meeting that provides leadership training (NOTE: This meeting includes members from FFA, FHA, DECA, VICA, FBLA, and HOSA.)
B.	Fall HOSA Leadership Conference (STATE)	All members of Oklahoma Association of HOSA can participate; leadership training for local chapter officers is provided; elections of secondary and full-time officers are held
C.	Spring HOSA Leadership Conference (STATE)	All members of Oklahoma Association of HOSA can participate; all members are provided with leadership training; provides competitive events and leadership-scholarship skills

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INFORMATION SHEET

D. National HOSA Convention — Each spring all members of HOSA can participate in competitive events and leadership-scholarship skills; election of national officers is held

XVII. Principles upon which parliamentary procedure is based

- A. Justice and courtesy for all
- B. Majority rule
- C. Right of the minority to be heard
- D. Protection of the rights of the individual
- E. Consideration of one thing at a time
- F. Maintenance of order
- G. Expedition of business

XVIII. Sequence of business carried out during a HOSA meeting (Assignment Sheets #2 and #4)

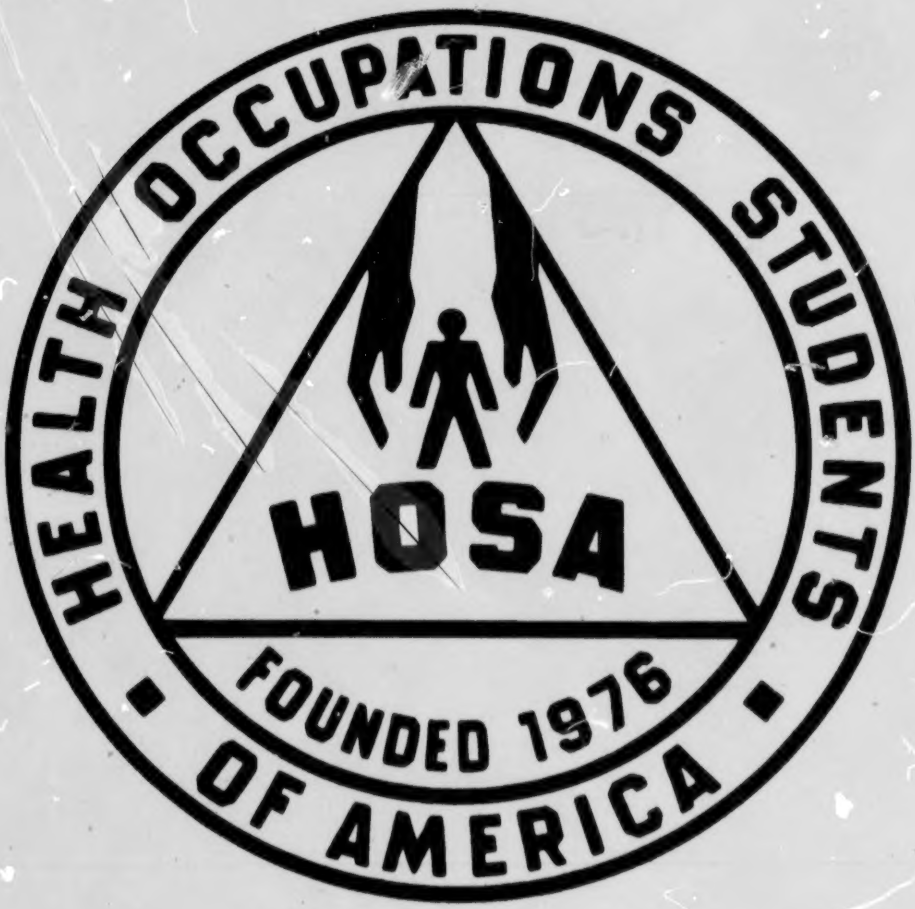
- A. Opening ceremony
- B. Reading and approval of minutes of previous meeting
- C. Committee reports
- D. Unfinished business
- E. New business
- F. Program
- G. Closing ceremony
- H. Entertainment and/or recreation

XIX. Characteristics of a good chairperson (Assignment Sheet #2

- A. Willingness to work
- B. Self-confidence
- C. Well-developed voice
- D. Neat appearance
- E. Ability to make fair and impartial judgements

HSC - 125-A

HOSA Emblem



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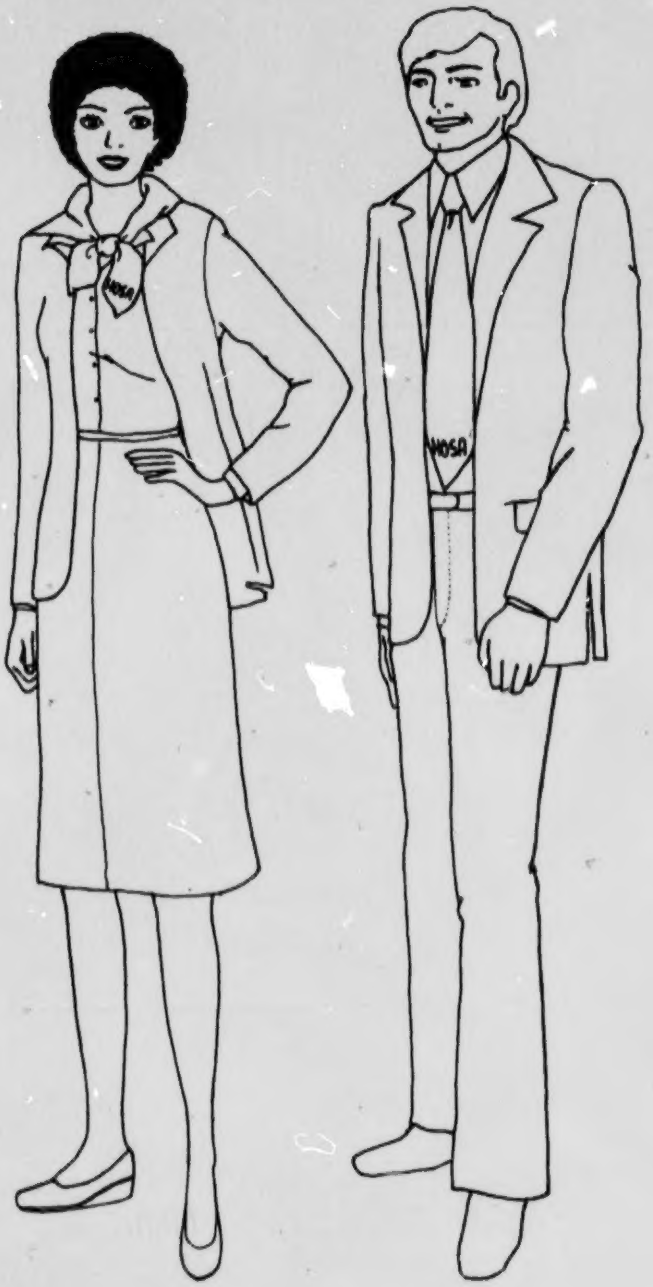
TM 1

HOSA
UNIT III

ASSIGNMENT SHEET #1--COLOR ME HOSA

Using the information about the official colors for the uniform, color the figures below.



HOSA
UNIT III

ASSIGNMENT SHEET #2--EVALUATE CHAPTER MEETING

Take notes at the next chapter meeting and record your findings below.

1. Did meeting follow the sequence of business as given in information sheet?

   ____

2. What topics were discussed?

   ____

   ____

   ____

   ____

3. Was parliamentary procedure followed correctly? ______________
4. How many people were involved in the discussion? ______________
5. Where was meeting held and how many people attended? ______________

   ____

6. What decisions were made during the meeting?

   ____

   ____

   ____

   ____

7. Was a guest speaker involved and what was his/her topic?

   ____

   ____

8. Did you make a motion and, if so, what type of motion?

   ____

   ____

9. Was the meeting organized? Did the chairperson handle the items for discussion well? ______________________________

HOSA
UNIT III

ASSIGNMENT SHEET #3--RECITE THE OKLAHOMA ASSOCIATION OF HOSA CREED

Read each paragraph carefully and try to memorize it. Then move on to the next paragraph until each one is memorized. Practice by saying the creed with a classmate and be able to recite it to the satisfaction of the instructor.

We are the HOSA's of Oklahoma. We face the future with understanding, feeling, and a dedication to improve health.

We strive to improve personal and community health by helping others to help themselves. We are concerned with the physical, social, and mental well-being of each individual.

Health is our first goal in having a clear conscience toward all communicable and noncommunicable disorders, disabilities, and other malfunctions.

Our main concern is to promote health services to each and every individual, for we strive to maintain a healthy and happy society.

For we are the HOSA's of Oklahoma. We face the future with understanding, feeling, and a dedication to improve health.

(NOTE: National HOSA will select a creed at a future date.)

HOSA
UNIT III

ASSIGNMENT SHEET #4--EVALUATE THE EFFECTIVENESS OF PARLIAMENTARY PROCEDURE

Using a topic given to you by the instructor, hold a meeting and use parliamentary procedure correctly. This activity may be used to practice for the competition for the HOSA skills contest. After the meeting is closed, evaluate the effectiveness of parliamentary procedure by answering the following questions.

1. Outline the order of business for the meeting.

____

____

____

____

____

____

2. Did the order of business follow the proper sequence? __________

3. How many people participated in the meeting? __________

4. How many motions were made? __________

5. Name the motions made.

____

____

____

____

6. Were any amendments made? __________

7. Name the amendments made.

____

____

____

____

ASSIGNMENT SHEET #4

8. What were the strong points of your meeting?

____

____

____

____

____

9. What weak points did you notice?

____

____

____

____

10. How can you improve your meetings?

____

____

____

____

HOSA
UNIT III

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with HOSA to their correct definitions by placing the correct numbers in the blanks provided.

_____a. Modifies or disposes of main motion; must be voted upon before vote is taken on main action

_____b. Set formal routine that is used at the beginning of each meeting

_____c. Student enrolled in an approved health occupations educational program; must be member of state organization in order to hold offices on the local, state, and national levels

_____d. Person appointed by the state supervisor and approved by executive council to advise and provide leadership for the state organization

_____e. Motion that arises or relates to procedure and may not refer directly to the main question

_____f. Person(s) designated by local school administration to advise and provide leadership for the local HOSA chapter

_____g. Proposal that something be done, method of bringing a question before the assembly for consideration

_____h. Student organization at the national level for students enrolled in health occupations programs

_____i. Person who may be associated with, or has participated in, the development of health occupations student organizations in Oklahoma as approved by the state organization

1. HOSA (Health Occupations Students of America)
2. State HOSA advisor
3. Local chapter advisor(s)
4. Active member
5. Professional member
6. Motion
7. Subsidiary motion
8. Incidental motion
9. Opening ceremony

______j. Set formal routine that is used at the end of each meeting

______k. Motion that has no connection with main motion and outranks other motions

______l. Student chosen to represent the local chapter in balloting on questions of business or elections of officers at state or national conferences

______m. Former active member who has remained in good standing with the chapter

______n. Individual who has made contributions to development of HOSA in Oklahoma and whose membership has been approved by the state executive council

______o. Introduces business or brings a question directly before the assembly

______p. Set of rules for conducting a meeting in an organized and efficient manner

10. Voting delegate
11. Main motion
12. Closing ceremony
13. Honorary life member
14. Parliamentary procedure
15. Alumni member
16. Privileged motion

2. Select from the list below benefits of membership in HOSA by placing an "X" in the appropriate blanks.

______a. Provides students with the opportunity to make realistic career choices

______b. Provides opportunity for students to be excused from other classes

______c. Helps students associate and exchange information with other students who have same interests

______d. Helps students gain self-confidence through development of leadership skills and abilities

______e. Helps students develop responsibility through service to the local community

______f. Allows officers to have special privileges

______g. Provides guidance to students who seek to develop knowledge, skills, and behavioral characteristics necessary in preparing for a future in a health career

______h. Assures students of earning a better grade

______i. Introduces students to a wide variety of health career choices

3. Match historical dates to important Oklahoma Association of HOSA events by placing the appropriate numbers in the blanks provided.

______a. Conference held in Tulsa, Oklahoma; included new adult chapters from the practical nursing programs

______b. Steering committee composed of teachers and state staff members was appointed and met for two days to investigate and make recommendations for the new organization; plans were made for the first chapters to be formed in September

______c. First state conference was held in Tulsa, Oklahoma for leadership training and skills contests

______d. Conference held in Oklahoma City, Oklahoma; adult and secondary officers were elected and installed

______e. Survey of interested health occupations instructors was taken to decide if a new organization should be formed for students in health occupations programs

______f. Meeting was held to elect state officers for the new health occupations student organization; officers were later installed and a name, colors, motto, creed, and emblem were selected

1. August, 1973
2. May 30-31, 1974
3. Fall, 1974
4. April, 1975
5. Spring, 1976
6. Fall, 1976

4. Match historical dates to important HOSA events by placing the appropriate numbers in the blanks provided.

______a. American Health Occupations Education Student Organization Constitutional Convention was held in Arlington, Texas; national by-laws were adopted and national officers were elected and installed; colors and the name, Health Occupations Students of America, were adopted

______b. First annual convention of HOSA was held in Oklahoma City, Oklahoma to select national uniform, motto, and emblem; to provide leadership training, and to involve students in skills contests

1. November, 1975
2. November, 1976
3. April, 1978

______c. Oklahoma was one of six original charter states involved in the organization of a national health occupations student organization in Cherry Hill, New Jersey

5. Select from the list below purposes of the HOSA organization by placing an "X" in the appropriate blanks.

______a. To guarantee employment for all

______b. To promote establishment of local Oklahoma Association of HOSA

______c. To provide opportunity to compete with other student vocational organizations

______d. To promote involvement in current health care issues, environmental concerns, and survival needs of the community, the nation, and the world

______e. To recognize individual achievement in scholarship, occupational skills, or services rendered by providing awards

______f. To promote interorganizational relationships with professional groups, businesses, industries, and other student organizations

______g. To give students a break from class routine

______h. To build students' confidence in themselves and their work by teaching them to assume responsibilities and develop occupational competencies and social skills

______i. To develop self-actualization of each member which will contribute to meeting the individual's psychological, social, and economic needs

______j. To develop programs and activities which will develop physical, mental, and social well-being of the individual and produce qualities of leadership, character, good citizenship, and respect for ethical practices

6. Select from the list below other student vocational organizations by placing an "X" in the appropriate blanks.

______a. DECA

______b. FFA

______c. WHO

______d. FHA-HERO

______e. MYF

_____f. VICA

_____g. FBLA

_____h. HOE

7. Write the HOSA motto.

____

____

8. Name the official HOSA colors.

a. ____

b. ____

c. ____

9. Describe the official HOSA dress code for members.

____

____

____

____

____

____

____

____

____

____

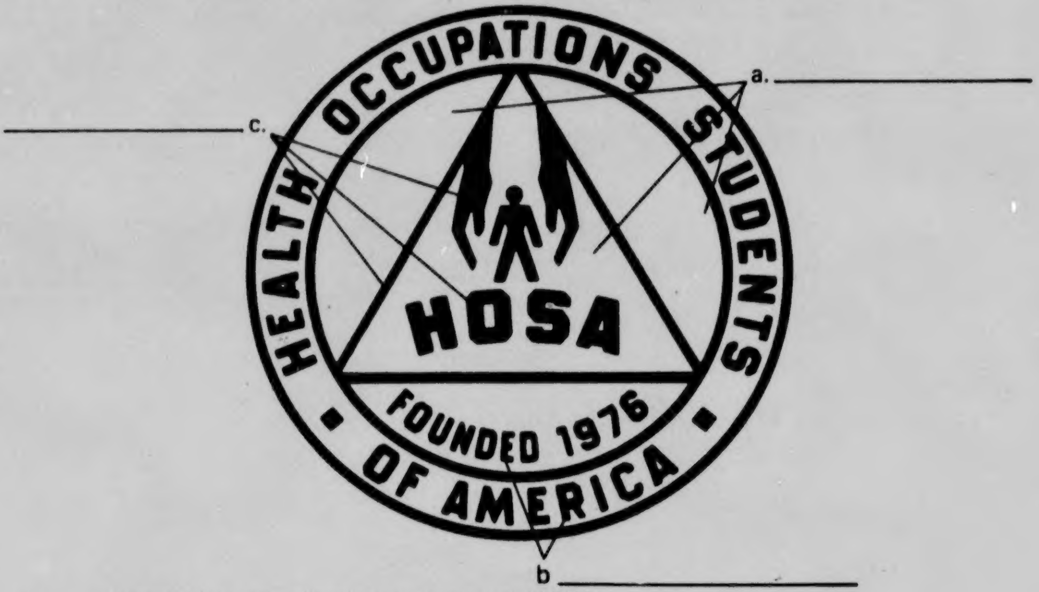
____

____

____

____

10. Identify the colors of the official HOSA emblem below.



11. Name the organizational levels of HOSA.

a. ______

b. ______

c. ______

12. Match chapter officers on the right to their duties by placing the appropriate numbers in the blanks provided.

______a. Prepares and reads minutes of all chapter meetings; maintains membership list and record of attendance; answers all chapter correspondence promptly; counts and records all votes; reads all communications at meetings; prepares an agenda for meetings

______b. Informs all members on correct parliamentary procedures

______c. Presides over all chapter meetings; serves as ex officio member on all committee meetings; supervises all efforts of chapter officers and committees

______d. Gathers and assembles all materials in preparation for the chapter scrapbook

______e. Takes charge of all religious activities during chapter meetings and banquets

1. Historian
2. President
3. Chaplain
4. Parliamentarian
5. Secretary

______ f. Prepares news releases regarding HOSA activities for all media

______ g. Assists the president; presides over chapter activities in absence of president; serves as chairperson of program committee

______ h. Keeps financial records of the chapter

______ i. Sets up and secures meeting rooms; attends the door during meetings and greets visitors; makes sure meeting room is comfortable; secures the meeting without interruption

6. Vice-president
7. Sentinel
8. Reporter
9. Treasurer

13. Name four essentials of a good chapter.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

14. Select from the list below criteria for selection of voting delegates by placing an "X" in the appropriate blanks.

______ a. High academic standing

______ b. Successful achievement in classroom assignments and laboratory activities while maintaining achievement in other school subjects

______ c. Active participation in all chapter meetings and assigned committees

______ d. Popular vote

15. Name types of chapter activities.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

16. Complete the chart below showing leadership training activities for HOSA.

Meetings	*Activity and Participants*
Spring HOSA Leadership Conference (State)	a. ______________________
b. ______________________	Each spring all members of HOSA can participate in competitive events and leadership-scholarship skills; election of national officers is held
Fall HOSA Leadership Conference (STATE)	c. ______________________
d. ______________________	Each summer state officers of vocational student organizations attend a meeting that provides leadership training

17. Select from the list below principles upon which parliamentary procedure is based by placing an "X" in the appropriate blanks.

_____a. Majority rule

_____b. Maintenance of order

_____c. Suppression of minority

_____d. Consideration of one thing at a time

_____e. Power to control by manipulation

_____f. Unlimited decision making by the chairperson

_____g. Right of minority to be heard

_____h. Justice and courtesy for all

_____i. Unlimited power of state advisor

_____j. Protection of the rights of the individual

_____k. Expedition of business

18. Arrange in order the sequence of business carried out during a HOSA meeting. Place a "1" for the first activity, a "2" for the second activity, and so on in the appropriate blanks.

_____a. Committee reports

_____b. New business

_____c. Closing ceremony

_____d. Opening ceremony

_____e. Unfinished business

_____f. Reading and approval of minutes of previous meeting

_____g. Program

_____h. Entertainment and/or recreation

19. Name characteristics of a good chairperson.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

20. Evaluate chapter meeting.

21. Recite the Oklahoma Association of HOSA creed.

22. Evaluate the effectiveness of parliamentary procedure.

HOSA
UNIT III

ANSWERS TO TEST

1. a. 7
   b. 9
   c. 4
   d. 2
   e. 8
   f. 3
   g. 6
   h. 1
   i. 5
   j. 12
   k. 16
   l. 10
   m. 15
   n. 13
   o. 11
   p. 14
2. a, c, d, e, g, i
3. a. 5
   b. 2
   c. 4
   d. 6
   e. 1
   f. 3
4. a. 2
   b. 3
   c. 1
5. b, d, e, f, h, i, j
6. a, b, d, f, g
7. The hands of youth mold the health of tomorrow
8. a. Hospital white
   b. Navy blue
   c. Maroon accent

9. Description should include:
    a. Female
        1) Navy blue blazer
        2) White or navy blue pants or skirt
        3) Maroon scarf with white HOSA imprint
        4) Plain, tailored white shirt with winged collar
    b. Male
        1) Navy blue blazer
        2) White or navy blue pants
        3) Maroon tie with white HOSA imprint
        4) Plain, tailored white shirt

10. a. White
    b. Maroon
    c. Blue

11. a. Local chapters
    b. State Oklahoma Association of HOSA
    c. National HOSA

12. a. 5
    b. 4
    c. 2
    d. 1
    e. 3
    f. 8
    g. 6
    h. 9
    i. 7

13. Any four of the following:
    a. Capable officers and leaders
    b. Responsibility for chapter activities shared by all members
    c. Challenging program of activities
    d. Proper recordkeeping
    e. Well-planned, regularly held chapter meetings
    f. Support from school officials and community leaders
    g. Active member participation in chapter activities

14. b, c

15. a. Professional activities
    b. Civic activities
    c. Service activities
    d. Social activities
    e. Fund-raising activities

16. a. All members of Oklahoma Association of HOSA can participate; all members are provided with leadership training; provides competitive events and leadership-scholarship skills
    b. National HOSA Convention
    c. All members of Oklahoma Association of HOSA can participate; leadership training for local chapter officers is provided; elections of secondary and full-time officers are held
    d. Vocational Leadership Institute (STATE)

17. a, b, d, g, h, j, k

18. a. 3
    b. 5
    c. 7
    d. 1
    e. 4
    f. 2
    g. 6
    h. 8

19. a. Willingness to work
    b. Self-confidence
    c. Well-developed voice
    d. Neat appearance
    e. Ability to make fair and impartial judgements

20. Evaluated to the satisfaction of the instructor

21. Evaluated to the satisfaction of the instructor

22. Evaluated to the satisfaction of the instructor

(NOTE: If activities 20-22 have not been accomplished prior to the test, ask the instructor when they should be completed.)

PERSONAL HEALTH
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to name factors that influence health and appearance and match mental mechanisms with their correct definitions. The student should also be able to evaluate personal health/grooming habits and personal coping strategies. This knowledge will be evidenced through completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with personal health to their correct definitions.
2. Name factors that influence health and appearance.
3. Select from a list essentials of body cleanliness.
4. Name elements of complexion care.
5. Select from a list essentials of well-groomed hair.
6. Name steps to take in promoting good posture.
7. Select from a list characteristics that show good health.
8. Select from a list characteristics of appropriate clothing selection.
9. Select from a list characteristics of an emotionally mature person.
10. Arrange in order steps to improve personality.
11. Match mental mechanisms with their correct definitions.
12. Distinguish between "normal" and "abnormal" behavior.
13. Select from a list causes leading to mental illness.
14. Name ways to prevent an emotional problem.
15. Evaluate personal health/grooming habits.
16. Evaluate personal coping strategies.

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PERSONAL HEALTH
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

  A. Provide student with objective sheet.

  B. Provide student with information and assignment sheets.

  C. Discuss unit and specific objectives.

  D. Discuss information and assignment sheets.

  E. Invite resource persons to class to demonstrate beauty care products or techniques to use as HOSA activity.

  F. Assign posters to be made by students depicting different aspects of health and beauty.

  G. Give test.

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

  C. Assignment sheets

    1. Assignment Sheet #1--Evaluate Personal Health/Grooming Habits

    2. Assignment Sheet #2--Evaluate Personal Coping Strategies

  D. Test

  E. Answers to test

III. Unit reference--Otto, James H. et al. *Modern Health*. New York: Holt, Rinehart, and Winston, 1975.

IV. Films:

  A. "Good Looks/Here and Now."* Available from Modern Talking Pictures, 2323 New Hyde Park Road, New Hyde Park, N.Y. 11040.

  B. "Let's Be Clean and Neat." Available from Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.

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*Also available only to Oklahoma teachers from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 W. 6th Street, Stillwater, OK 74074.

PERSONAL HEALTH
UNIT I

INFORMATION SHEET

I. Terms and definitions associated with personal health

A. Health--State of complete physical, mental, and social well-being, not merely the absence of disease or infirmity

(NOTE: This definition comes from the World Health Organization, a group concerned with world-wide health problems and their prevention.)

B. Emotion--Any specific feeling, such as fear, hate, love, anger, grief, or joy, with mental and physical states which result from them

C. Personality--Each individual's unique organization of traits, characteristics, and modes of behavior

D. Habits--Acts first performed voluntarily which after repetition are performed as reflex actions

Examples: Chewing food exactly twenty times, counting cracks in sidewalk while walking, patting hair exactly ten times

E. Mannerism--Exaggeration of speech or behavior

(NOTE: These are useless acts that have become habits and are associated with fidgeting or nervousness.)

Examples: Doodling, table drumming, wringing hands, knuckle cracking, nail biting, and hair twisting are some of the common mannerisms

F. Attitude--Behavior toward a person, group, thing, or situation representative of conscious or unconscious mental views developed through cumulative experience

G. Conscience--Knowledge or feeling of right and wrong with a compulsion to do right

H. Anxiety--State of being uneasy or worried about what may happen

I. Phobia--Irrational, persistent fear of some particular thing or situation

J. Psychosis--Mental disorder in which the personality is very seriously disorganized; victim is totally out of touch with reality

Example: Schizophrenia

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INFORMATION SHEET

K. Neurosis--Most common and moderate form of mental illness which occurs in response to stressful environmental conditions and resulting anxiety, fears, apprehension, depression, and panic

(NOTE: This type of mental illness is usually much easier to treat than psychosis.)

L. Mental mechanisms--Defensive behavior adjustments that occur without one's awareness; aid in coping with reality

(NOTE: These behavior adjustments are also referred to as defense mechanisms and coping mechanisms. They are normal responses unless use becomes an overcompensation.)

M. Depression--Mental state characterized by dejection, lack of hope, and absence of cheerfulness

II. Factors that influence health and appearance

A. Cleanliness

(NOTE: Daily cleansing of the entire body with a lather of mild soap and water is probably the most important single health and beauty practice.)

1. Use of products to eliminate body odor

a. Antiperspirants

b. Deodorants

2. Use of products to eliminate breath odor

(NOTE: Use mouth wash and brush teeth to prevent odors from smoking and eating highly seasoned foods.)

3. Regular shampooing of hair

4. Face cleansing upon arising and before going to bed

B. Food

(NOTE: A nutritional diet based on the four basic food groups will lead to good health and an attractive appearance.)

C. Elimination

(NOTE: Headaches, unpleasant breath, and poor complexion are often the result of irregular elimination habits.)

D. Exercise

E. Sleep and rest

F. Posture

INFORMATION SHEET

G. Eye care

H. Teeth cleaning

I. Habits

Examples: Smoking, drinking, using harmful drugs

III. Essentials of body cleanliness

A. Daily bath or shower

B. Daily use of a deodorant or antiperspirant

C. Daily change of undergarments

D. Use of only lightly scented colognes, aftershaves, or body powders

E. Brushing teeth after every meal, if possible

(NOTE: Learn to use dental floss effectively.)

F. Dental check every six months

G. Use of mouthwash morning and night

H. No facial hair

I. Clean and neatly trimmed or filed nails

J. Clean, shiny, and neat hair

IV. Elements of complexion care

A. Proper cleansing

(NOTE: Each individual has their own type of skin and must find a method for cleansing that is effective. Those with oily skin need to find a soap or astringent that will keep excessive oil under control, and those with dry skin need to find a soap and moisture lotion that is not too heavy but will keep their skin soft and hydrated.)

B. Proper diet

(NOTE: A diet using the four basic food groups and drinking plenty of fluids will help insure a healthy complexion.)

C. Plenty of sleep and rest

D. Exercise and stimulation

(NOTE: The skin needs circulatory stimulation, fresh air, and sunshine.)

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INFORMATION SHEET

V. Essentials of well-groomed hair

   A. Clean hair

      (NOTE: Shampoo hair as often as needed for the type of hair you have. Oily hair needs to be shampooed more frequently, and dry hair will need a conditioner to keep it from having split ends.)

   B. Clean equipment

      (NOTE: At least once a week clean all brushes and combs with warm, soapy water. Avoid borrowing another person's comb or brush.)

   C. Immediate treatment of any scalp conditions

      (NOTE: Dandruff and other scalp conditions can sometimes be treated by over-the-counter products, but if a condition becomes worse and affects a larger area of the hair, professional help from a dermatologist is needed.)

   D. Selection of a personally appropriate, easy care hairstyle

      (NOTE: Determine a good hairstyle by considering your hair texture, face contour, and even the particular job you will be doing. Hair is a carrier of bacteria. In the health occupations, hair needs to be kept away from face and away from procedures that you are performing. In some institutions, the dress code will determine hair style restrictions for both men and women.)

VI. Steps to take in promoting good posture

   A. Hold shoulders erect

   B. Hold chest high

   C. Hold head erect

   D. Pull abdomen in

   E. Distribute body weight on both feet

   (NOTE: Body mechanics and good posture are essential in the health careers because you are not only a model and a teacher of good health practices, but many jobs entail lifting, carrying, or even sitting for long periods of time.)

VII. Characteristics that show good health

   A. Clear, smooth skin

   B. Bright, clear eyes

INFORMATION SHEET

C. Good body posture

D. Cheerful disposition

VIII. Characteristics of appropriate clothing selection

A. Clothing

1. Spotlessly clean and wrinklefree

(NOTE: In most health occupations, uniforms are worn. Many varieties and styles both in white and colors are available. Some facilities provide uniforms for employees or a uniform allowance that can be used to buy uniforms. Some hospitals will launder employees' uniforms at no charge.)

2. Free from rips, tears, missing buttons, or sagging hemline

3. Properly fitted

(NOTE: Clothing should fit well, not bagging but not skin tight.)

B. Accessories

1. Shoes kept clean, polished, and in good repair

(NOTE: Because many of the professions call for being on the feet a good deal of the time, choose duty shoes that fit well. It is better to spend more for good quality shoes than to pay many times for poorer quality shoes that could lead to serious foot problems later.)

2. Hosiery free from snags and runners

(NOTE: If health worker tends to have problems with circulation, it is advisable to wear a type of support hosiery.)

3. Undergarments appropriate for outer garments

4. Jewelry kept simple, not overpowering

(NOTE: Many facilities have stated in their dress code that jewelry cannot be worn with a uniform. It not only looks unprofessional to wear a ring on every finger and large dangling earrings, but it is dangerous to wear this type of jewelry in some health occupations.)

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INFORMATION SHEET

IX. Characteristics of an emotionally mature person

- A. Is considerate of others
- B. Channels emotional drives into constructive activity
- C. Accepts disappointments with courage and composure
- D. Is confident of success and willing to wait and work for it
- E. Adjusts to other people
- F. Creates a relaxed and pleasant social atmosphere

X. Steps to improve personality

- A. Recognize the need for improvement
- B. Have a desire to improve
- C. Evaluate strong and weak points
- D. Develop a plan for improvement
- E. Follow through with your plan

XI. Mental mechanisms

A. Rationalization--Type of alibi used to avoid loss of self-esteem and to prevent guilt feelings

Examples: "I'd rather be popular than smart."

You see something you can't afford but buy it anyway, telling yourself that it was such a good bargain that you just couldn't refuse.

B. Projection--Shifting blame for something you did to someone or something else because you can't accept your responsibility

Examples: "I didn't get the pay raise because the boss likes Joe better."

"I couldn't hit that ball right because the old bat doesn't work right."

C. Compensation--Substituting one goal for another

Example: Joe really wanted to play football but just didn't have the muscle coordination, so he used the drive and enthusiasm to make the newspaper staff and became editor

INFORMATION SHEET

D. Sublimation--Drive redirected toward a constructive objective

Example: Ellen loves sports and she often uses them to work out her aggressiveness and hostility instead of directing those feelings toward others

E. Displacement--Transference of feelings from one person or object to another

Example: Jan didn't like Ron's new friend, Bill, but couldn't say just why. The more of Bill she saw, the more she realized why she didn't like him; he reminded her of a cousin whom she dislikes. She had transferred those feelings of dislike to Bill

F. Identification--Form of hero worship; idolizing someone we would like to be like

Example: Bob admires Justin Boffman, the great actor, has an autographed picture, and has seen all of his plays and movies. Bob takes drama in school, is active in local theater productions in his town, and hopes to attend the local college and major in drama

XII. "Normal" and "abnormal" behavior

A. Normal behavior

1. Problems are solved by people altering their environment
2. Crises are faced without frustration and a minimum of emotional turmoil
3. Behavior is adapted to other people and adjustments are made easily to new situations
4. Goals are pursued and life has purpose

B. Abnormal behavior

1. People are controlled by their environment
2. Adjustment cannot be made to other people
3. Purpose and pleasure in living is lost
4. Thought and emotional processes become disturbed enough that persons can no longer live with themselves or with others

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INFORMATION SHEET

XIII. Causes leading to mental illness

A. Stress

B. Tension

C. Emotional conflicts

Examples: Guilt, anxiety, trouble in the home

XIV. Ways to prevent an emotional problem

A. Keep the emotions under control

(NOTE: Keep balance in your life by working, sleeping, relaxing, and finding some type of recreation to keep the pressure under control.)

B. Talk it off

(NOTE: Blow off your emotional "steam" to a sympathetic listener.)

C. Think it off

(NOTE: Consider both sides of problem and attempt to see the other person's viewpoint. You could learn something.)

D. Work it off

(NOTE: Get out there and jog, play tennis, sew. Try to work out your emotions.)

PERSONAL HEALTH
UNIT I

ASSIGNMENT SHEET #1–EVALUATE PERSONAL HEALTH/GROOMING HABITS

Good grooming is essential to career success. Poor personal appearance was identified as the number one reason why people are not hired during an employment interview. Remember, the employer's first impression of you is based on how you look. Furthermore, an employer expects you to continue to "represent" the facility in appearance and action. With this in mind, complete the chart below and then answer the questions which follow.

	Always	Most of the time	Occasionally	Seldom or Never
BODY CLEANLINESS AND CARE Do you bathe at least once daily?				
Do you bathe soon after participating in strenuous activity?				
Do you use an effective deodorant daily?				
Do you keep your undergarments fresh and clean?				
POSTURE Do you sit properly without slouching?				
Do you stand properly with chin up and shoulders back?				
Do you walk with your head held high and at a fast pace?				
TEETH, MOUTH, AND BREATH Do you have a dental checkup at least once a year?				
Do you brush your teeth at least twice daily?				
Do you use a preventative as often as necessary to avoid bad breath?				

ASSIGNMENT SHEET #1

	Always	Most of the time	Occasionally	Seldom or Never
Are you conscious of the fact that too much gum and sweets may be harmful to your teeth?				
HAIR Do you avoid combing or brushing your hair in public?				
Do you wash your hair at least once a week?				
Do you brush your hair daily as needed?				
Do you wear your hair in a style that is becoming to you?				
Do you keep your brush and comb clean?				
If you have dandruff, have you tried a medicated shampoo or seen a doctor?				
FACE Is your skin clean and well-cared for?				
Is your makeup obvious?				
Do you avoid applying makeup in public?				
Are you clean shaven?				
HANDS Do you refrain from biting your fingernails?				
Are your fingernails clean and trimmed to a moderate length?				

ASSIGNMENT SHEET #1

CLOTHING

	Always	Most of the time	Occasionally	Seldom or Never
Do you keep your clothes in good repair, that is, no ripped seams, no missing buttons, and no pins, tape, or staples in hems?				
Do your clothes look neat, clean, and pressed?				
Do your clothes fit properly?				
Do you wear clothes appropriate to the occasion?				
Do you wear shoes that fit properly?				
Do you keep your shoes brushed or polished and in good condition? (NOTE: Avoid overrun heels, scuffs, and lack of shoelaces.)				
Do you keep your outer garments free from dandruff, lint, etc.?				
Do you ever use clothing as a means to rebel against school and parental authority?				

GENERAL HEALTH AND APPEARANCE

Do you make an effort to eat a balanced diet each day?				
Do you watch your weight carefully and try to keep it at the recommended weight for you?				
Do you avoid "junk foods"?				
Do you avoid eating what you know is harmful to your complexion?				

ASSIGNMENT SHEET #1

	Always	Most of the time	Occasionally	Seldom or Never
If you had a serious skin problem, would you consult a dermatologist?				
Do you get enough sleep each night?				
Do you have physical checkups regularly?				
Do you get sufficient physical activity?				
Are you absent no more than 1 1/4 days out of thirty on account of illness?				
Do you choose clothes that are becoming to your body?				
Do you avoid extremes in styles?				

1. What are your strengths in your personal grooming habits?

ASSIGNMENT SHEET #1

2. What areas of your personal grooming habits need improvement?

Adapted from Homemaking Research Laboratories. Individual Instruction Units in Clothing. Tony, Wisconsin, 1976.

PERSONAL HEALTH
UNIT I

ASSIGNMENT SHEET #2--EVALUATE PERSONAL COPING STRATEGIES

Everyone at some time uses mental mechanisms to cope with daily problems in life. Using the information given to you in the unit, give examples of your behavior and identify the type of mental mechanism that you used.

1. Rationalization--

2. Projection--

3. Compensation--

4. Sublimation--

5. Displacement--

6. Identification--

PERSONAL HEALTH
UNIT I

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with personal health to their correct definitions by placing the correct numbers in the appropriate blanks provided.

_____a. Exaggeration of speech or behavior

_____b. Mental disorder in which personality is very seriously disorganized; the victim is totally out of touch with reality

_____c. Defensive behavior adjustments that occur without one's awareness; aid in coping with reality

_____d. Mental state characterized by dejection, lack of hope, and absence of cheerfulness

_____e. Acts first performed voluntarily which after repetition are performed as reflex actions

_____f. State of being uneasy or worried about what may happen

_____g. State of complete physical, mental, and social well-being, not merely the absence of disease or infirmity

_____h. Behavior toward a person, group, thing, or situation representative of conscious or unconscious mental views developed through cumulative experience

_____i. Any specific feeling, such as fear, hate, love, anger, grief, or joy, with mental and physical states which result from them

_____j. Each individual's unique organization of traits, characteristics, and modes of behavior

_____k. Knowledge or feeling of right and wrong with a compulsion to do right

1. Mental mechanisms
2. Emotion
3. Habits
4. Personality
5. Depression
6. Anxiety
7. Mannerism
8. Attitude
9. Health
10. Conscience
11. Psychosis
12. Neurosis
13. Phobia

_____l. Irrational, persistent fear of some particular thing or situation

_____m. Most common and moderate form of mental illness which occurs in response to stressful environmental conditions and resulting anxiety, fears, apprehension, depression, and panic

2. Name six factors that influence health and appearance.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

3. Select from the list below essentials of body cleanliness by placing an "X" in the appropriate blanks.

_____a. Weekly bath or shower

_____b. Hair styled in beauty shop biweekly

_____c. Clean and neatly trimmed or filed nails

_____d. Daily use of a deodorant or antiperspirant

_____e. Abundant facial hair

_____f. Monthly change of undergarments

_____g. Use of only lightly scented colognes, aftershaves, or body powders

_____h. Brushing teeth after every meal, if possible

_____i. Dental check every three years

_____j. Use of mouthwash morning and night

4. Name three elements of complexion care.

a. ____________________

b. ____________________

c. ____________________

5. Select from the list below essentials of well-groomed hair by placing an "X" in the appropriate blanks.

   _____a. Clean hair

   _____b. Equipment cleaned once a year

   _____c. Immediate treatment of any scalp condition

   _____d. Use of hair spray at least twice daily

   _____e. Consistent use of medicated shampoo

   _____f. Selection of a personally appropriate, easy care hairstyle

   _____g. Hair brushed vigorously to improve oil production

6. Name steps to take in promoting good posture.

   a. ____

   b. ____

   c. ____

   d. ____

   e. ____

7. Select from the list below characteristics that show good health by placing an "X" in the appropriate blanks.

   _____a. Clear, smooth skin

   _____b. Deep, dark suntan

   _____c. Fashionably thin figure

   _____d. Bright, clear eyes

   _____e. Good body posture

   _____f. Hyperdeveloped muscles

   _____g. Cheerful disposition

   _____h. High energy level

8. Select from the list below characteristics of appropriate clothing selection by placing an "X" in the appropriate blanks.

   _____a. Jewelry according to individual's taste

   _____b. Undergarments appropriate for outer garments ______c. Clothing spotlessly clean and wrinklefree

______d. Tight clothing

______e. Clothing free from rips, tears, missing buttons, or sagging hemlines

______f. Shoes kept clean, polished, and in good repair

______g. Hosiery with runners if unavoidable

9. Select from the list below characteristics of an emotionally mature person by placing an "X" in the appropriate blanks.

______a. Demands that others adjust to him/her

______b. Is considerate of others

______c. Expects instant success with every effort

______d. Has no effect on social atmosphere

______e. Channels emotional drives into constructive activity

______f. Is severely set back by disappointments

10. Arrange in order steps to improve personality by placing a "1" for the first step, a "2" for the second step, and so on.

______a. Have a desire to improve

______b. Follow through with your plan

______c. Recognize the need for improvement

______d. Develop a plan for improvement

______e. Evaluate strong and weak points

11. Match mental mechanisms to their correct definitions by placing the correct numbers in the appropriate blanks provided.

______a. Type of alibi used to avoid loss of self-esteem and to prevent guilt feelings

______b. Transference of feelings from one person or object to another

______c. Substituting one goal for another

______d. Form of hero worship; idolizing someone we would like to be like

______e. Drive redirected toward a constructive objective

1. Compensation
2. Sublimation
3. Projection
4. Rationalization
5. Identification
6. Displacement

_____f. Shifting blame for something you did to someone or something else because you can't accept responsibility

12. Distinguish between "normal" and "abnormal" behavior by placing an "N" for normal behavior and an "A" for abnormal behavior in the appropriate blanks.

_____a. Thought and emotional processes become disturbed enough that persons can no longer live with themselves or with others

_____b. Goals are pursued and life has purpose

_____c. Crises are faced without frustration and a minimum of emotional turmoil

_____d. People are controlled by their environment

_____e. Purpose and pleasure in living is lost

_____f. Behavior is adapted to other people and adjustments are made easily to new situations

_____g. Problems are solved by people altering their environment

_____h. Adjustment cannot be made to other people

13. Select from a list essentials of well-groomed hair by placing an "X" in the appropriate blanks.

_____a. Poor nutrition

_____b. Tension

_____c. Emotional conflicts

_____d. Emphysema

_____e. Common cold

_____f. Stress

14. Name ways to prevent an emotional problem.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

15. Evaluate personal health/grooming habits.

16. Evaluate personal coping strategies.

(NOTE: If activities 15 and 16 have not been accomplished prior to the test, ask the instructor when they should be completed.)

PERSONAL HEALTH
UNIT I

ANSWERS TO TEST

1. a. 7
   b. 11
   c. 1
   d. 5
   e. 3
   f. 6
   g. 9
   h. 8
   i. 2
   j. 4
   k. 10
   l. 13
   m. 12

2. Any six of the following:
   a. Cleanliness
      1) Use of products to eliminate body odor
         a) Antiperspirants
         b) Deodorants
      2) Use of products to eliminate breath odor
      3) Regular shampooing of hair
      4) Face cleansing upon arising and before going to bed
   b. Food
   c. Elimination
   d. Exercise
   e. Sleep and rest
   f. Posture
   g. Eye care
   h. Teeth cleaning
   i. Habits

3. c, d, g, h, j

4. Any three of the following:
   a. Proper cleansing
   b. Proper diet
   c. Plenty of sleep and rest
   d. Exercise and stimulation
5. a, c, f
6. a. Hold shoulders erect
   b. Hold chest high
   c. Hold head erect
   d. Pull abdomen in
   e. Distribute body weight on both feet
7. a, d, e, g
8. b, c, e, f
9. b, e
10. a. 2
    b. 5
    c. 1
    d. 4
    e. 3
11. a. 4
    b. 6
    c. 1
    d. 5
    e. 2
    f. 3
12. a. A
    b. N
    c. N
    d. A
    e. A
    f. N
    g. N
    h. A

13. b, c, f

14. a. Keep emotions under control
    b. Talk it off
    c. Think it off
    d. Work it off

15. Evaluated to the satisfaction of the instructor

16. Evaluated to the satisfaction of the instructor

COMMUNITY HEALTH
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to classify agencies and organizations according to their voluntary or official capacities and name common problems that can occur in every community. The student should also be able to prepare to be a resource person and research the functions of an organization or agency. This knowledge will be evidenced through completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with community health to their correct definitions.
2. Classify agencies and organizations according to their voluntary or official capacities.
3. Name services provided through Planned Parenthood groups.
4. Complete a chart on types of birth control and their advantages, disadvantages, and effectiveness.
5. Select from a list services offered through a guidance clinic.
6. Name common problems that can occur in every community.
7. Research functions of an organization or agency.
8. Prepare to be a resource person.
9. Write an essay on a current national health issue or problem.

COMMUNITY HEALTH
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and assignment sheets.

   C. Discuss unit and specific objective, information and assignment sheets.

   D. Arrange for field trips to various agencies in your community.

   E. Invite resource people to speak to class about the organizations they represent.

   F. Pick a project to complete for your community or try to solve a problem that your community faces.

   (NOTE: Promote a "Clean Up Day" or a "Beautify Our City Day" or support a local agency by campsigning or collecting for a certain organization like the muscular dystrophy group. Use this as a HOSA civic activity.)

   G. Construct posters depicting various health issues.

   (NOTE: May use as HOSA chapter activity or for competition.)

   H. Suggest films to show to class or HOSA chapter.

   I. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Assignment sheets

      1. Assignment Sheet #1--Research Functions of an Organization or Agency

      2. Assignment Sheet #2--Prepare to be a Resource Person

      3. Assignment Sheet #3--Write an Essay on a Current National Health Problem or Issue

   D. Test

   E. Answers to test

III. Unit references:

A. Otto, James H. et al. *Modern Health.* New York: Holt, Rinehart, and Winston, 1976.

B. Ross, Carmen F. *Personal and Vocational Relationships in Practical Nursing.* Philadelphia: J. B. Lippincott Company, 1969.

IV. Films:

A. "Is It Always Right to be Right?"* Available from Roundtable Films, 113 N. San Vincente Blvd., Beverly Hills, CA 90211.

B. "New Road Ahead." Available from Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.

C. "Community Health in Action." Available from Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.

(NOTE: The Oklahoma State Health Department has many films dealing with health problems and solutions. Send for their film catalog.)

V. Additional resource--Rocky Mountain Planned Parenthood Publications, 1852 Vine St., Denver, Colorado 80206.

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*Also available only to Oklahoma teachers from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 W. 6th Street, Stillwater, Oklahoma 74074.

COMMUNITY HEALTH
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Immunization--Method through which people can be protected from disease, especially infectious disease

(NOTE: Immunity can be natural, acquired, active, or passive.)

B. Official/public agencies--Supported through public funds from government taxes and administered by appointees of the federal, state, or local government

C. Department of Health, Education, and Welfare (HEW)--Official federal agency that sets up and directs programs to help improve the conditions of life for each individual and as a national family

D. Social Security System--National system to provide health, old age, survivors, and disability insurance that cover all people who work outside the home for a living

E. Medicare--Health insurance plan promoted by the government to aid people age sixty-five or older

F. Social and Rehabilitation Services--Division of Health, Education, and Welfare organized to set up programs to aid handicapped and disabled individuals

(NOTE: Training programs are set up to teach employable skills and health care, and rehabilitative equipment is fitted to give independence and facilitate movement for individuals.)

G. Food and Drug Administration (FDA)--Administers and enforces many acts that promote purity, truthful, informative labeling of consumer products

Examples: Food, Drug and Cosmetic Act, Fair Packaging and Labeling Act, Caustic Poison Act

H. Public Health Service--Provides programs for research and gives grants to states for health services; provides training programs to improve health in local communities; offers medical and psychiatric examinations

I. State health department--Provides health education materials, including a film library, pamphlets, books, and folders on various health subjects

(NOTE: The state health department may be responsible for licensing embalmers, manufacturers of narcotics and other controlled drugs, hospitals, nursing homes, and other agencies.)

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INFORMATION SHEET

J. Local health department--Provides many services to local communities, such as immunizations, reporting communicable diseases, public health nursing, health education, environmental sanitation, and maternal and child health services

K. World Health Organization (WHO)--Special agency of the United Nations that works throughout the world to raise health standards

(NOTE: Control of communicable diseases is WHO's main goal.)

L. Private and voluntary health agencies--Organizations that receive support from sources such as United Fund, donations, gifts, endowments, membership fees, and sometimes public funds

(NOTE: These agencies are usually administered by a board of directors who volunteer their services. They include the American Dietetic Association, American Medical Association, American Hospital Association, and many others.)

M. Alcoholics Anonymous--Voluntary organization made up of former alcoholics who help other alcoholics help themselves

(NOTE: Al-anon is a group that works with families of alcoholics and Alateen is primarily for the children of alcoholics. Both groups strive to learn how to live with the alcoholic but not to cure him/her; only the alcoholic can decide to quit drinking.)

N. American Cancer Society--Educates the public and supports facilities for the detection, diagnosis, and treatment of cancer

(NOTE: Groups form through the American Cancer Society to work with specific problem areas. Such groups include Reach to Recovery, Laryngectomy Club, and the Ostomy Club.)

II. Voluntary and official agencies or organizations

A. Voluntary

1. American Dietetic Association
2. American Medical Association
3. American Pharmaceutical Association
4. American Cancer Society
5. American Red Cross
6. American Diabetes Association
7. American Heart Association

INFORMATION SHEET

8. National Association for Mental Health
9. Planned Parenthood
10. Parents Without Partners
11. Salvation Army

B. Official

1. Department of Health, Education, and Welfare
2. Social and Rehabilitation Services
3. Public Health Service
4. State and local health departments
5. World Health Organization

(NOTE: There are other agencies and organizations that deal with health care, but these are the well-known ones.)

III. Services provided through Planned Parenthood groups

(NOTE: Most groups will provide the following services.)

A. Contraception/birth control counseling

B. Referrals for sterilization

C. Genetic counseling

D. Social workers to provide various types of counseling

(NOTE: In dealing with unplanned pregnancies, these counselors can make referrals to available agencies.)

E. Fees either free if funded by some official agency or based on a sliding scale

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INFORMATION SHEET

IV. Birth control methods, advantages, disadvantages, and effectiveness

TYPE	ADVANTAGES	DISADVANTAGES	EFFECTIVENESS
A. Pill (NOTE: Many brands are on the market today.)	Easy to take; periods usually shorter with less flow	May cause nausea, weight gain, breakthrough bleeding; increased incidence of vascular disease (NOTE: There has been much publicity about research findings concerning the possibility of tissue damage, causing cancer.)	99%-100%
B. Diaphragm with spermicidal jelly	Not a systemic drug; no physical risks	Must be fitted by doctor and checked periodically; must be inserted each time before intercourse and left in six to eight hours afterward; must be scrupulous in cleaning and storing	95% if used correctly with jelly
C. Foam (NOTE: There are many brands on today's market.)	Do not need prescription; easy to insert; no physical risk unless allergic to chemical	Must be scrupulous in cleaning applicator; must be inserted each time before intercourse	If used with a condom, 100%; without condom, 70-85%
D. Condom (NOTE: Many different brands are available.)	Do not need prescription; no physical risks; reduces chance of contracting venereal disease	Male must take responsibility; lack of sensitivity; must be used prior to intercourse	If used with foam, 100%; without foam, 95%

INFORMATION SHEET

	TYPE	ADVANTAGES	DISADVANTAGES	EFFECTIVENESS
E.	IUD (Intrauterine device) (NOTE: Many forms are available.)	Does not need to be inserted each time	May rupture uterus; has to be inserted by physician and checked periodically; infections frequently occur, causes cramping and bleeding in some women	95%-97%
F.	Rhythm	No prescription needed; no physical risk	Period of ovulation cannot be counted on	60%-80%
G.	Withdrawal	No prescription needed; no physical risks	Dangerous because depends on man to take responsibility to not ejaculate in vagina or near pubis or thighs	10%-15%

INFORMATION SHEET

V. Services offered through a guidance clinic

   A. Individual counseling

   B. Marriage counseling

   C. Family counseling

   D. Group therapy

   E. Workshops for all ages

   F. Psychiatric testing

   (NOTE: Clinics can be privately financed by the psychiatrists or psychologists, or they can be state funded. Many university psychology departments have free psychological/psychiatric clinics.)

VI. Common problems that can occur in every community

   A. Sanitation problems

   (NOTE: Each community should have a water purification system and a safe sewage disposal system. Restaurants should be checked frequently to check quality of food and health of employees.)

   B. Drug abuse

   (NOTE: Even a small community is not safe from drug pushers and abusers. Narcotic laws should be followed to the letter, and public education on types of drugs should be available.)

   C. Natural disasters

   (NOTE: Every community should be ready for acts of nature depending on the geographical location. Tornadoes, floods, hurricanes, fire, and earthquakes are just a few that can occur. A good defense system involving the entire community should be ready in an instant to evacuate and treat victims and do whatever it takes to get the community back on its feet. Practice drills should be held frequently to make sure all is ready.)

   D. Pollution

   (NOTE: Frequent checks should be made of air content, especially if there are many industry facilities in the community. Water in local streams, and lakes should be checked for purity. Litter should be cleaned from all areas and waste disposal areas should be checked for proper methods of elimination.)

INFORMATION SHEET

E. Crime

(NOTE: Crime in any community poses problems. Learn how to protect yourself, your family, and your home as you best can. Be active in community projects to cut down crime. Support the local agency that fights crime in your community.)

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COMMUNITY HEALTH
UNIT II

ASSIGNMENT SHEET #1--RESEARCH FUNCTIONS OF AN ORGANIZATION OR AGENCY

Choose one of the organizations listed on the next page and gather information about its functions, funding, administration, and services offered. Collect pamphlets, obtain films, or have someone from the organization come speak to the class or as a HOSA activity. Be sure you ask the following questions plus any additional information you find.

1. What is the main function of the organization?

2. Is it an official organizaton or a volunteer agency?

3. How is the organization funded?

4. Are the administrators appointed, voted in, or hired from public?

5. What services does the organization or agency provide?

6. What types of career opportunities are available in this agency or organization?

ASSIGNMENT SHEET #1

Below are some examples of organizations and agencies. You may select one of these or choose other interests:

1. State Health Department
2. Local Health Department
3. World Health Department
4. United Fund
5. Alcoholics Anonymous

   (NOTE: Anyone is welcome at an AA meeting; it is a good experience for anyone to see the excellent work that this organization does.)

6. American Cancer Society
7. Colostomy Club
8. Laryngectomy Club
9. Reach to Recovery
10. American Diabetes Association
11. American Red Cross
12. Association for the Aid of Crippled Children
13. Family Service Association
14. Muscular Dystrophy Association of America
15. National Association for Mental Health
16. National Council on Aging
17. National Rehabilitation Association
18. National Hemophilia Foundation
19. Parents Without Partners
20. Planned Parenthood
21. Salvation Army
22. United Cerebral Palsy Association
23. United Service Organizations
24. Visiting Nurse Association

ASSIGNMENT SHEET #1

25. Birthright
26. American Heart Association
27. American Lung Association
28. National Foundation of March of Dimes
29. Trauma Society

COMMUNITY HEALTH
UNIT II

ASSIGNMENT SHEET #2--PREPARE TO BE A RESOURCE PERSON

Using the knowledge you have gained about various agencies and organizations, answer the questions following each of the situations below. As a health worker, people will look to you for information when they need help and health care.

1. A new family moves into the neighborhood with several children ranging from about three months to preschool age. The mother asks you about immunizations for the children. They have moved several times in the last three years and haven't had time to find a doctor. Because of the move, their finances are rather tight.

   What agency would you suggest? ______________________

   What immunizations are available? ______________________

   ____

   Will there be a fee? ______________________

   If so, what will it be? ______________________

2. A friend of your family is really having a rough time at home. The father is an alcoholic and is not working. The mother works two jobs, and there are younger children at home.

   What agency or organizations could be of help? ______________________

   ____

   What can be done to help this family? ______________________

   ____

   ____

   ____

3. A close friend confides to you that she may be pregnant. She is afraid to tell her parents and does not know what to do or who to see.

   What agency or organization can help her? ______________________

ASSIGNMENT SHEET #2

What can you tell her that might be of some help? ______________________

____

____

____

____

4. Billie was caught at school with drugs in his possession. He admits to you that he has been abusing hard drugs and wants to stop. His health is poor and he is making bad grades in school because he often skips. When he is there, he cannot concentrate.

What agency or organization can help Billie? ______________________

What can you tell him that might help? ______________________

____

____

____

____

5. A distant relative comes to your city with her fiancé and asks for your assistance. They want to get married and would like some counseling about birth control and genetics. Funds are low and they want to find a place to get blood tests and exams at a low cost.

What agency can help the couple? ______________________

____

6. A classmate in your high school class confides to you that he may have a venereal disease. He doesn't want to go to the doctor because they will tell his parents. He tells you his symptoms, and you can see that he is very upset.

What agency can help him? ______________________

Is there a way he can be treated without parents' consent? __________

____

How can you help him? ______________________

____

____

COMMUNITY HEALTH
UNIT II

ASSIGNMENT SHEET #3--WRITE AN ESSAY ON A CURRENT NATIONAL HEALTH ISSUE OR PROBLEM

Pick up any newspaper and you will see articles on major health issues in our country. Cancer research has decided that almost everything produces carcinogenic chemicals; new methods of birth control for both men and women are being developed; organ transplants are now a reality instead of a dream; and new foods from plants are being developed. These are only a few of the issues we see and hear about each day on the radio and television and read about in newspapers and magazines.

Choose an issue that interests you. Research the information using at least three different sources. Write an essay on the topic including how you feel about the issue and if you have a solution to the problem. Share this with your class by group discussion, panel discussion, or even by making a poster and giving your information to the class.

COMMUNITY HEALTH
UNIT II

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with community health to their correct definitions by placing the correct numbers in the appropriate blanks.

_____a. Health insurance plan promoted by the government to aid people age sixty-five or older

_____b. National system to provide health, old age, survivors' and disability insurance that cover all people who work outside the home for a living

_____c. Administers and enforces many acts that promote purity and truthful and informative labeling of consumer products

_____d. Voluntary organization made up of former alcoholics who help other alcoholics to help themselves

_____e. Provides health education materials, including a film library, pamphlets, and books and folders on various health subjects

_____f. Method through which people can be protected from disease, especially infectious disease

_____g. Provides many services to local communities, such as immunizations, reporting communicable diseases, public health nursing, health education, environmental sanitation, and maternal and child health services

_____h. Division of Health, Education, and Welfare organized to set up programs to aid handicapped and disabled individuals

1. State health department
2. Social Security System
3. Social and Rehabilitation Services
4. Food and Drug Administration (FDA)
5. Immunization
6. Medicare
7. Alcoholics Anonymous
8. Local health department

______ i. Special agency of the United Nations that works throughout the world to raise health standards

______ j. Educates the public and supports facilities for the detection, diagnosis, and treatment of cancer

______ k. Supported through public funds from government taxes and administered by appointees of the federal, state, or local government

______ l. Official federal agency that sets up and directs programs to help improve the conditions of life for each individual and as a national family

______ m. Provides programs for research and gives grants to states for health services; provides training programs to improve health in local communities; offers medical and psychiatric examinations

______ n. Organizations that receive support from sources such as United Fund, donations, gifts, endowments, membership fees, and sometimes public funds

9. American Cancer Society

10. Department of Health, Education, and Welfare (HEW)

11. Public Health Service

12. Private and voluntary health agencies

13. World Health Organization (WHO)

14. Official/public agencies

2. Classify the agencies and organizations below according to their voluntary or official capacities by placing a "V" for voluntary and an "O" for official in the appropriate blanks.

______ a. Salvation Army

______ b. American Dietetic Association

______ c. Department of Health, Education, and Welfare

______ d. State and local health departments

______ e. American Medical Association

______ f. Parents Without Partners

______ g. World Health Organization

______ h. Planned Parenthood

_____i. Public Health Service

_____j. American Cancer Society

_____k. American Red Cross

_____l. American Diabetes Association

_____m. Social and Rehabilitation Services

_____n. American Pharmaceutical Association

_____o. National Association for Mental Health

3. Name services provided by Planned Parenthood groups.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

4. Complete the chart below on types of birth control and their advantages, disadvantages, and effectiveness by filling in the appropriate blanks.

TYPE	ADVANTAGES	DISADVANTAGES	EFFECTIVENESS
a. __________	Easy to take; periods usually shorter with less flow	May cause nausea, weight gain, breakthrough bleeding; increased incidence of vascular disease	99%-100%
Diaphragm with spermicidal jelly	Not a systemic drug; no physical risks	Must be fitted by doctor and checked periodically; must be inserted each time before intercourse and left in six to eight hours afterward; must be scrupulous in cleaning and storing	b. __________ __________ __________
Foam	Do not need prescription; easy to insert; no physical risk unless allergic to chemical	c. __________ __________ __________ __________	If used with a condom, 100%; without condom, 70-85%

TYPE	ADVANTAGES	DISADVANTAGES	EFFECTIVENESS
Condom	d. ____________	Male must take responsibility; lack of sensitivity; must be used prior to intercourse	If used with foam, 100%; without foam, 95%
e. ____________	Does not need to be inserted each time	May rupture uterus; has to be inserted by physician and checked periodically; infections frequently occur; causes cramping and bleeding in some women	95%-97%
Rhythm	No prescription needed; no physical risk	Period of ovulation cannot be counted on	f. ____________
Withdrawal	No prescription needed; no physical risks	Dangerous because depends on man to take responsibility to not ejaculate in vagina or near pubis or thighs	g. ____________

5. Select from the list below services offered through a guidance clinic by placing an "X" in the appropriate blanks.

_____a. Individual counseling

_____b. Financial planning

_____c. Workshops only for disabled individuals

_____d. Family counseling

_____e. Group therapy

_____f. Medical services

_____g. Immunization for children

_____h. Marriage counseling

6. Name common problems that can occur in every community.

a. ____

b. ____

c. ____

d. ____

e. ____

7. Research functions of an organization or agency.

8. Prepare to be a resource person.

9. Write an essay on a current national health issue or problem.

(NOTE: If activities 7-9 have not been accomplished prior to the test, ask the instructor when they should be completed.)

COMMUNITY HEALTH
UNIT II

ANSWERS TO TEST

1. a. 6
   b. 2
   c. 4
   d. 7
   e. 1
   f. 5
   g. 8
   h. 3
   i. 13
   j. 9
   k. 14
   l. 10
   m. 11
   n. 12

2. a. V
   b. V
   c. O
   d. O
   e. V
   f. V
   g. O
   h. V
   i. O
   j. V
   k. V
   l. V
   m. O
   n. V
   o. V

3. a. Contraception/birth control counseling
   b. Referrals for sterilization
   c. Genetic counseling
   d. Social workers to provide various types of counseling
   e. Fees either free if funded by some official agency or based on a sliding scale

4. a. Pill
   b. 95% if used correctly with jelly
   c. Must be scrupulous in cleaning applicator; must be inserted each time before intercourse

   d. Do not need prescription; no physical risks; reduces chance of contracting venereal disease

   e. IUD (Intrauterine device)

   f. 60%-80%

   g. 10%-15%

5. a, d, e, h

6. a. Sanitation problems

   b. Drug abuse

   c. Natural disasters

   d. Pollution

   e. Crime

7. Evaluated to the satisfaction of the instructor

8. Evaluated to the satisfaction of the instructor

9. Evaluated to the satisfaction of the instructor

FIRST AID
UNIT III

UNIT OBJECTIVE

After completion of this unit, the student should be able to arrange in order actions to take when giving first aid and match first, second, and third degree burns to their treatment. The student should also be able to control bleeding by direct pressure, apply a tourniquet, perform CPR, apply dressings and bandages, and apply a splint. This knowledge will be evidenced through completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with first aid to their correct definitions.
2. Name reasons why knowledge of first aid is important.
3. Discuss reasons why first aid training is needed.
4. Arrange in order actions to take when giving first aid.
5. Identify major vessel pressure points to be used when attempting to control bleeding.
6. Describe care given to a victim with a bite wound.
7. Select from a list factors to consider in treating a victim with an eye injury.
8. Select from a list symptoms to observe for brain damage.
9. Match types of treatment of poison ingestion to the correct poisonous substance.
10. Select from a list factors to consider in treatment of shock.
11. Describe first aid given for contact poisoning.
12. Select from a list major causes of poisoning.
13. Select from a list causes of respiratory failure.
14. Arrange in order actions to take when a victim is bitten by a poisonous snake.

15. Match terms associated with drugs and their use to their correct definitions.
16. Complete a chart on symptoms and treatment for types of drug overdose or abuse.
17. Classify burns by degree according to their descriptions.
18. Match first, second, and third degree burns to their correct treatments.
19. Select from a list signs and symptoms of a heart attack.
20. Select from a list signs and symptoms of fainting.
21. Match types of seizures to their correct descriptions.
22. Determine priority of care in emergency situation.
23. Describe treatment for poisonous insect bites.
24. Demonstrate the ability to:
    a. Control bleeding by direct pressure.
    b. Apply a tourniquet.
    c. Perform CPR (cardiopulmonary resuscitation).
    d. Apply dressings and bandages.
    e. Apply a splint.

FIRST AID
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information, assignment, and job sheets.

   C. Discuss unit and specific objectives.

   D. Discuss information and assignment sheets.

   E. Demonstrate and discuss procedures outlined in job sheets.

   F. Use Assignment Sheet #1 to role play treatment or discuss it as a class.

   G. Invite Red Cross personnel to visit to aid in teaching cardiopulmonary information using their mannequins or other first aid information.

   H. Ask emergency medical technicians or paramedic personnel to visit class and HOSA activities to give demonstrations or speak on career opportunities.

   I. Write to the American Heart Association for information and film list.

   J. Call the Poison Control Center for available information and packets.

   K. Tour the emergency room units and the ambulance agency in your local community.

   L. Have a practice first aid drill using other students, faculty, or parents having a variety of injuries.

   M. Participate in your local hospital's disaster drill.

   N. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Assignment sheets

      1. Assignment Sheet #1--Determine Priority of Care in Emergency Situation

      2. Assignment Sheet #2--Describe Treatment for Poisonous Insect Bites

D. Job sheets

1. Job Sheet #1--Control Bleeding by Direct Pressure

2. Job Sheet #2--Apply a Tourniquet

3. Job Sheet #3--Perform CPR (Cardiopulmonary Resuscitation)

4. Job Sheet #4--Apply Dressings and Bandages

5. Job Sheet #5--Apply a Splint

E. Test

F. Answers to test

III. Unit references:

A. American Red Cross. *Standard First Aid and Personal Safety*. Garden City, New York: Doubleday and Company, Inc., 1976.

B. Thomas, Clayton L. *Taber's Cyclopedic Medical Dictionary*. Philadelphia: F. A. Davis Company, 1977.

IV. Additional resources:

A. Films

1. "Drug Abuse: The Chemical Tomb." Oklahoma State Department of Health, 3400 N. Easter, Oklahoma City, OK 73105.

2. "Drug Talk: Some Current Drug Programs." Available from Oklahoma State Department of Health.

3. "First Aid Now." Available from Oklahoma State Department of Health.

4. "First Aid on the Spot." Available from Oklahoma State Department of Health.

(NOTE: Film lists can be obtained from the American Heart Association and the American Red Cross by notifying your local Red Cross chapter.)

B. Filmstrips

1. "What to Do in an Accident." Available from Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

2. "This Is an Emergency." Available from Trainex Corporation.

3. "Poison!" Available from Trainex Corporation.

C. Associations

1. American Red Cross. Write or call local chapter or obtain pamphlet list from Channing L. Bete Co., Inc., 45 Federal St., Greenfield, Mass. 01301.

2. American Heart Association, National Center, 7320 Greenville Ave., Dallas, Texas 75231.

3. Emergency Medical Technology Program, 7777 S. May, Oklahoma City, Oklahoma 73159.

FIRST AID
UNIT III

INFORMATION SHEET

I. Terms and definitions

A. Asphyxiation--Decrease in amount of oxygen and increase in amount of carbon dioxide in the body as a result of some interference with respiration

(NOTE: Symptoms include rapid pulse, difficult breathing, mental disturbances, bluish discoloration of the skin, and, in extreme cases, unconsciousness and death.)

Examples: Carbon monoxide from gas exhaust, electric shock, drugs, drowning, traumatic injuries to respiratory organs, diseases that affect respiratory passages

B. Hemorrhage--Abnormal internal or external discharge of blood; external symptom is obvious blood flow and internal symptom is shock

(NOTE: Bleeding from veins is dark red in color and flows slowly; bleeding from arteries is bright red in color and flows in spurts. Either one can be very dangerous and death can occur very quickly from loss of blood.)

C. Abrasion--Scraping away of a portion of skin or mucous membrane as a result of injury or by mechanical means; bleeding is slight and usually consists of slow oozing with only danger being infection

(NOTE: Treatment consists of cleaning wound and medicating area which then may be covered by dressing.)

D. Incision--Cut or wound made with sharp instrument

(NOTE: Treatment would depend on the length and depth of the incision. Suturing might be needed after thorough cleansing of wound and sterile dressing applied. Antibiotics may need to be given to prevent infection.)

E. Laceration--Wound or irregular tear of flesh

(NOTE: Treatment depends on the extent of damage to tissue. Thorough cleansing of wound is a must and suturing might be needed; dressing is applied and antibiotics might be given to prevent infection.)

F. Wound--Break in soft parts of body tissues which may be internal or external; caused by trauma or violence to areas of body

(NOTE: A *closed wound* is one that involves injury to underlying tissues without a break in the skin, such as a bruise. An *open wound* is one that involves a break in the skin, such as a laceration. A *puncture wound* is one in which the tissue is pierced by a sharp object creating a hole in the tissues which can be a dangerous source of infection.)

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INFORMATION SHEET

G. Avulsion--Tearing away forcibly of body part or tissues

(NOTE: In many cases, only a dressing is applied until surgical repair can be done. Limbs and other structures should be saved in case surgery can rejoin them to the body. Appendages should be packed in ice, if possible, for transport.

H. Contusion--Injury in which skin is not broken

Example: Bruise

I. Dressing--Protective cover placed over wound

(NOTE: This is also called a *compress*.)

J. Bandage--Strip of woven material used to hold wound dressing or splint in place; helps to immobilize, support, and protect injured body part

K. Priority--Importance of action relative to other possible actions

(NOTE: In an emergency, injuries should be treated according to their seriousness.)

L. Fracture--Breaking of a bone

(NOTE: A *closed fracture* is one in which the skin is not broken. An *open fracture* is one in which skin is broken and the broken bone often protrudes through the opening.)

M. Antidote--Substance which neutralizes poisons and their effects

N. Emetic--Agent which induces vomiting

(NOTE: In some cases of poisoning, this is an effective way of ridding the stomach of its contents. Quantities of water, milk, or other dilutants should be given before emetic is given. Ipecac is a common emetic and may be bought over the counter for home use.)

O. Strain--Injury to muscle resulting from overstretching

P. Sprain--Trauma to a joint which causes pain and disability; may even result in torn ligaments

Q. Shock--Condition resulting from ineffective circulation of blood and oxygen; characterized by symptoms of marked decrease in blood pressure, rapid pulse, and decreased kidney function

(NOTE: Shock can be the result of major hemorrhage, electrical shock, severe trauma, and emotional disorder.)

INFORMATION SHEET

R. Poison--Any substance that interferes with normal physiological functions when taken into the body orally, inhaled, injected, or absorbed through the skin

S. Drug--Substance that may affect body or mind when taken into the body or applied to its surface

T. Frostbite--Freezing or effect of extreme cold on parts of the body

(NOTE: Symptoms begin with tingling and redness and then paleness and numbness. Treatment consists of gradual warming of the part to 39.4° to 40.6°C (103° to 105°F). Gangrene of body part may occur requiring surgical removal.)

U. Stroke--Sudden, severe attack of illness

Examples: Heat stroke, cerebrovascular accident

V. Convulsion--Involuntary attack causing victim to lose consciousness

(NOTE: This may also be known as a *seizure*.)

W. Splint--Device that immobilizes injured part when fracture is suspected

(NOTE: Splints also decrease pain and prevent further injury.)

X. Aura--Sensation that may precede an epileptic seizure by several hours or only by a few minutes; warns victim of attack

(NOTE: This may be a type of sensory hallucination, such as a certain smell, vision, or noise.)

II. Reasons why knowledge of first aid is important

A. May mean the difference between life and death

B. May mean the difference between temporary and permanent injuries

C. Trains one in what to do and what not to do in an emergency

III. Reasons why first aid training is needed

A. Accidents are the number one cause of death

B There may not be time to wait for professional medical [illegible]p after an accident

C. Safety awareness needs to be promoted in the home, at work, and at play

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INFORMATION SHEET

IV. Actions to take when giving first aid

A. Observe overall emergency

(NOTE: Find out exactly what happened as quickly as possible because this will prepare you in examining the victim and in assessing priority of actions.)

B. Check breathing

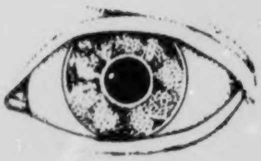
(NOTE: Check by laying your hand on victim's chest and holding your ear to victim's nose and mouth.)

C. Check pulse or heartbeat

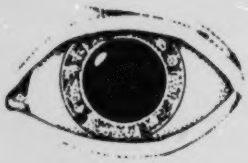
(NOTE: Radial pulse may be reduced, so check the carotid pulse in the neck or the femoral pulse in the groin.)

D. Observe for pupil reactions of the eyes

(NOTE: Pupils may be constricted or dilated.)



Constricted



Dilated

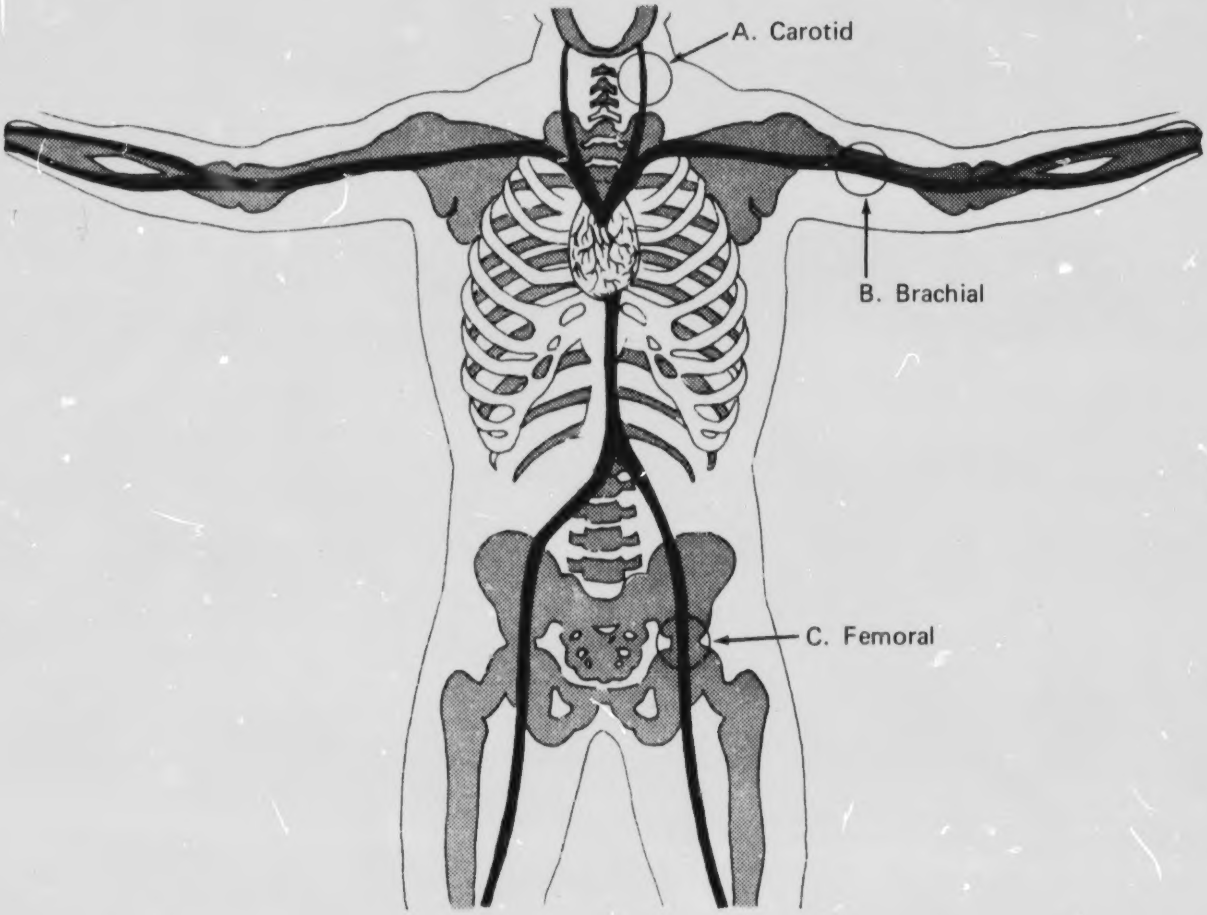
E. Check alertness level if victim is conscious by asking questions about physical status

F. Begin definite first aid treatment for symptoms

(NOTE: If you are not sure of symptoms and/or cause of emergency, keep victim quiet, warm, and do not give anything to drink or eat.)

INFORMATION SHEET

V. Major vessel pressure points



VI. Care given to a victim with a bite wound

(NOTE: A bite from a human or animal can be a puncture, laceration, or avulsion wound. These can be extremely dangerous because of the many types of bacteria in the mouth. A bite can even result in gangrene or rabies.)

A. Cleanse wound thoroughly

(NOTE: Use an antiseptic soap and warm water.)

B. Seek medical attention immediately if face or neck has been bitten

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INFORMATION SHEET

C. Restrain any animal that you may suspect of having rabies or to which you are not sure a rabies vaccine has been given

(NOTE: Do not kill the animal unless absolutely necessary. If killing the animal is necessary, be sure to save the head intact.)

D. Apply a dressing and avoid movement of injured area until seen by a doctor

VII. Factors to consider in treating victim with an eye injury

(NOTE: Extreme care should be taken in treatment of injuries of the eye. The eye is very sensitive and can easily be further damaged if the correct method of treatment is not carried out.)

A. Do not let the victim rub the eye

B. Do not attempt to remove a foreign object by using any sharp object

C. Keep victim flat on back if injury is caused by penetrating object or a severe blow

D. Cover eye with a clean dressing if foreign object is lodged in eyes and can not be removed easily with flushing of water or by using a clean cloth

(NOTE: Flushing of eye should be done with extreme care to avoid further injury, infection, or contamination of the other eye. Flush from inner corner to outside, letting fluid flow to side of face. Transport patient to eye specialist when possible.)

VIII. Symptoms to observe for brain damage

A. Temporary loss of consciousness

B. Speech disturbance

C. Convulsions

D. Bleeding from nose, ear canal, or mouth

E. Pupils unequal in size

(NOTE: Obtain medical assistance as quickly as possible if you suspect brain damage. Keep victim lying down. Maintain an open airway and do not give the victim any liquids.)

INFORMATION SHEET

IX. Treatment of poison ingestion

A. Strong acid--Neutralize substance with a dose of milk of magnesia and a glass of diluting fluid, such as milk or water; do not induce vomiting

(NOTE: Vomiting is not induced because emesis of a strong acid or alkali could cause further burns in respiratory and gastric tracts. Vomiting a petroleum product can also cause pneumonia. If victim has burns around the lips and mouth, if you can smell a characteristic odor on the breath, such as gasoline, or if the victim is having convulsions, do not induce vomiting.)

B. Noncorrosive substance--Give appropriate antidote; induce vomiting by a variety of methods

Examples: Giving large amounts of water, milk, egg whites, olive oil, soap water, and common over-the-counter emetics

(NOTE: The best possible treatment is to take victim to the nearest emergency center. In the meantime, gather all needed information you have to be taken with victim. If victim vomits, be sure to save some of the emesis that might need to be analyzed. There are many agencies that can give you aid if you will call them. The police department, fire department, the local hospital, and poison control centers will provide you with immediate information about antidotes to give and steps to take to give other first aid treatment. The Oklahoma Poison Control Center is based at Children's Memorial Hospital and will send a packet upon request, including a chart of poisons and their treatment and other first aid material about insect and snake bites. Their address is Children's Memorial Hospital. P.O. Box 26307, Oklahoma City, Oklahoma 73126. The telephone number is 405-271-5454.)

X. Treatment of shock

(NOTE: Shock may be caused from the loss of any body fluid resulting from prolonged conditions, severe injuries, infection, heart attack or stroke, poisoning from different sources, and the lack of oxygen. Shock may also be caused by metabolic disorders, such as diabetes.)

A. Keep victim lying down

B. Maintain adequate supply of oxygen (O_2)

C. Cover only enough to keep victim from losing body heat and to stabilize blood circulation

D. Use good judgment in giving fluids; consider the victim's condition and the cause of shock

(NOTE: Give only a few sips at a time and give no alcoholic beverages. If there is a danger of aspiration or vomiting, do not give any fluids.)

E. Get medical help as soon as possible

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INFORMATION SHEET

XI. First aid given for contact poisoning

(NOTE: Many chemicals and plants have poisonous substances that can cause injury, illness, and maybe even death if victim is not treated.)

A. Remove all contaminated clothing and flush all exposed areas thoroughly with soap and water

B. Find source of irritation to determine what type of treatment is needed

C. Apply mild lotion, such as calamine, if rash occurs

(NOTE: If severe rash occurs, seek medical attention as soon as possible.)

D. Seek medical attention immediately if respiratory symptoms, such as difficulty in breathing or wheezing, occur

(NOTE: Many persons with allergies are very sensitive to poison ivy, poison oak, and poison sumac and can quickly become very ill. Symptoms may include itching, redness, a rash, headache, and fever.)

XII. Major causes of poisoning

(NOTE: Small children are the most frequent victims of poisoning because they tend to put everything into their mouths; however, adults are frequent victims for various reasons.)

A. Medicines left within reach of children

(NOTE: Medicine should never be referred to as candy or left within reach of a child.)

B. Poisonous substance taken from the original labeled container and put into common household containers

C. Improper use of poisonous spray substances

D. Drug overdoses

E. Combination of drugs and alcohol

(NOTE: Poisoning may occur through mouth, skin absorption, inhalation, or injection. The most important consideration when treating a victim of poisoning is locating the container and finding out what type of substance was taken. If victim is unconscious and container is missing, observe victims for symptoms to determine type of agent.)

INFORMATION SHEET

XIII. Causes of respiratory failure

A. Obstruction by foreign object

(NOTE: Partial or complete blockage of the respiratory tract can be caused by a foreign object lodged in any part of the tract.)

B. Atmospheric imbalance

(NOTE: Air that is depleted of oxygen or contains toxic gases can cause a respiratory arrest.)

C. Respiratory tract disorders

Examples: Asthma, diphtheria, croup

D. Allergic reactions

Examples: Reactions to drugs, chemicals

XIV. Actions to take when a victim is bitten by a poisonous snake

(NOTE: The practice of making an incision into the wound and drawing out the venom is now discouraged.)

A. Keep victim as quiet as possible with affected area lower than victim's heart

(NOTE: Many reactions from snakebite are aggravated by acute fear and anxiety.)

(CAUTION: Do not given any alcoholic substances. Victim can have sips of other fluids unless vomiting.)

B. Apply a constricting band tightly enough to slow circulation, but not tightly enough to cut if off completely

(NOTE: Proper adjustment will result in slow oozing from the wound.)

C. Apply ice pack, if possible

(NOTE: If possible, call ahead to a medical facility so that they will have antivenom available to give victim immediately.)

XV. Terms and definitions associated with drugs and their use

A. Drug misuse--Use of drugs for effects or conditions for which they are not properly suited, or for correct purposes but administering or taking an incorrect dose

B. Drug abuse--Excessive or persistent use of a drug without medical regulation

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INFORMATION SHEET

C. Drug dependence--Compulsive desire to take drug to experience its effect or to avoid the discomfort in its absence

D. Hallucinogens--Drugs that produce bizarre mood changes which produce disturbances of thoughts, emotions, and sensations; illusions; and delusions

E. Stimulants (uppers)--Drugs used to increase mental activity and to offset exhaustion

F. Tranquilizers--Drugs used to reduce mental stress and excitement without interfering with normal mental activity

G. Narcotics--Drugs which depress the central nervous system and are usually habit-forming; are controlled by government

H. Depressants--Drugs which depress nervous system and body functions, producing relaxation and sleep

I. Inhalants--Volatile substances that when purposely breathed cause an intoxicated feeling

XVI. Symptoms and treatment for types of drug overdose or abuse

DRUG	SYMPTOMS	TREATMENT
Alcohol	Feelings of exhilaration but reduced mental and physical alertness; in severe stages, decreased respirations and possible coma	Treat according to severity of symptoms; if intake produces symptoms of shock, treat for shock
Marijuana	Occasional dizziness, uncoordination, increased heart rate, reddening of eyes, throat irritation	No emergency treatment unless victim is very disoriented and has psychotic reaction
Depressants Examples: Phenobarbital, Secobarbital, Pentobarbital	Decrease in breathing possibly resulting in coma; reduction of mental and physical activity; possible death when mixed with alcohol	Maintain body temperature and open airway; get victim to hospital at once

INFORMATION SHEET

DRUG	SYMPTOMS	TREATMENT
Hallucinogens Examples: Mescaline, LSD, psilocybin, "Morning Glory Seeds," and a number of synthetic substances	Increased heart rate, blood pressure, and temperature; dilated pupils; paranoid delusions; hallucinations; and a complete loss of emotional control	Talk the person down in calm tones; transport to hospital as soon as possible
Inhalants Examples: Glue or cement, gasoline, nail polish and remover, kerosene, and many paints and lacquers	Irritation of respiratory tract, unsteadiness; excitement at first, then depression that can lead to unconsciousness	If bag has been used, remove at once; give respiratory assistance if breathing has stopped and get to hospital immediately
(NOTE: Inhaling is done with substance on a cloth held over nose and mouth, or with a paper or plastic bag with the substance in it over the head.)		
Narcotics Examples: Opium, Paregoric, Morphine, Demerol, Methadone, Dilaudid, Heroin	Reduction in activity and awareness, decrease in breathing, profuse sweating, fall in temperature, constriction of pupils, nausea and vomiting, sleep, and possible coma	Arouse the victim; maintain open airway and normal body temperature; seek medical help immediately
Stimulants Examples: Amphetamines, Benzedrine, Ritalin, Methedrine	Confusion, disorganization, irritability, fear, aggressive and antisocial behavior, delusions, and hallucinations	Protect from injury; maintain open airway and normal body temperature; obtain help for psychiatric disorders
Tranquilizers Examples: Miltown, Equanil, Librium, Placidyl, and Valium	Decrease in body temperature, blood pressure, respiratory depression; deepening state of unconsciousness	Arouse the victim; maintain open airway and get victim to hospital as soon as possible

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INFORMATION SHEET

XVII. Types of burns

A. First degree burns

(NOTE: First degree burns usually result from overexposure to the sun, light contact with hot objects, or contact with hot water or scalding steam.)

1. Redness or discoloration
2. Mild swelling and pain
3. Rapid healing

B. Second degree burns

(NOTE: Second degree burns result from contact with hot liquids or a deep sunburn.)

1. Pain greater than first degree
2. Damage extending into the first layer of tissue
3. Mottled or red areas
4. Blistering
5. Considerable swelling
6. Wet appearance of burned area due to loss of plasma

C. Third degree burns

(NOTE: These can be caused by flame, ignited clothing, contact with hot objects, immersion in hot water, or electricity.)

1. Deep tissue destruction
2. Less pain due to nervous tissue destruction

   (NOTE: Pain may be greatly diminished by nervous tissue being burned.)

3. Charred or a white casted appearance

INFORMATION SHEET

XVIII. Treatment of first, second, and third degree burns

(NOTE: When assessing burns, it is wise to look at the percentage of the body burned and the areas injured to determine treatment.)

A. First degree--Apply cold water or submerge burned area in cold water; apply a dry dressing if necessary

B. Second degree--Submerge the part in cold, but not ice, water until pain subsides; blot dry gently and apply dry sterile dressings; do not break blisters and do not use any antiseptic ointments, sprays, or home remedies on burned area

C. Third degree--Cover burns with thick sterile dressings, but do not immerse in water; do not remove any tissue or burned clothing; transport victim to hospital as quickly as possible

XIX. Signs and symptoms of heart attack

A. Persistent chest pain, usually under the sternum, which frequently radiates to one or both shoulders or arms and to the neck, jaw, or both

B. Shortness of breath

C. Bluish discoloration or pallor of lips, skin, and nail beds

D. Shock symptoms (in most cases)

(NOTE: Indigestion, nausea, and vomiting are often associated with a heart attack.)

XX. Signs and symptoms of fainting

A. Extreme pallor

B. "Cold sweats"

C. Vertigo

(NOTE: Vertigo/dizziness may be caused from a variety of conditions involving equilibrium.)

D. Numbness and tingling of extremities

E. Nausea

F. Visual disturbances

(NOTE: Usually, people who faint revive after a short time. To prevent fainting when the above symptoms occur, victim should lie down or bend head over to knee level.)

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INFORMATION SHEET

XXI. Types of seizures

A. Grand mal--Often preceded by a sensation called an *aura;* victim becomes unconscious; muscle spasms occur; salivation increases; coma-like state occurs

(NOTE: Victim needs to be protected from external environment; clothing needs to be loosened; and obstacles that might injure victim need to be removed. If respiratory failure occurs, artificial respiration should be given.)

B. Petit mal--Seizure activity consists of periods of momentary unconsciousness; eyes will stare, then blink: usually lasts only a few seconds each time

C. Jacksonian--Seizure activity is limited to one side of the body or various groups of muscles

(NOTE: After a grand mal seizure, patient should be allowed to sleep. Many types of seizures can be controlled with anticonvulsant drugs, such as Dilantin.)

FIRST AID
UNIT III

ASSIGNMENT SHEET #1-DETERMINE PRIORITY OF CARE IN EMERGENCY SITUATION

One evening while driving on a two lane highway on the edge of a small town, you arrive first at the scene of a three car accident. You see a man in the center of the highway waving to you for help, and you can see several others lying or sitting by the cars. You pull to the side of the road and get out of the car as the man who was waving comes toward you. "We've had a terrible wreck. My son is badly hurt, and I don't think that woman over there is still alive; please help us." You quickly observe two mangled cars and glass over the pavement and roadside. The third car does not appear to be damaged as much, but you can see what appears to be gasoline leaking and there are strong fumes in the atmosphere. As you observe the scene, you look at each person who has been injured to see what will need to be done.

(NOTE: For simplification purposes, people will be identified as A, B, C, D, E, and F.)

Man A--The one who was waving you down appears to be in his late fifties. He is talking very rapidly, and his skin is very pale, cool, and clammy. A deep laceration approximately four inches long on the forehead above his left eye is oozing blood. His hands and arms are covered with small cuts and abrasions.

Man B--The son of Man A is approximately twenty years old and is lying by the first car clutching his right leg with the knee drawn up. His pants leq is torn and soaked with blood and the leg appears to be twisted. His shirt is also torn and you can see multiple cuts and abrasions on chest area. He is moaning and crying with pain as he clutches his leg.

Man C--An older man, approximately in his seventies, is kneeling over Woman D calling her name over and over. His right arm is cradling his left arm. You can see through the torn sleeve that the arm is injured, and there is a bone protruding above the elbow. He is crying silently and you hear some wheezing when he exhales.

Woman D--An older woman in her sixties, wife of Man C, is lying on her side by the second car. Her color is very pale and there are no respirations that you can see. The pulse is weak and thready and she has a laceration on her right arm that is bleeding actively. You learn from Man C that his wife had a heart attack three months ago and has been on medication since then.

Woman E--Young woman in her thirties is pacing around the third car, crying, wringing her hands and muttering to herself. She stops to wipe blood and tears from her face and hands. Other than superficial cuts and bruises, she does not appear to have any injuries.

Woman F--The mother of Woman E and is in her late fifties. Woman F is sitting beside the third car holding her right arm and hand over her left rib cage. Her left ankle is beginning to swell and is quite bruised. She appears fairly calm and tells you that she is diabetic and did not have any lunch because they were in a hurry to get to the town for a visit. She is very concerned about her daughter because she is quite nervous and has had some emotional problems in the last year.

ASSIGNMENT SHEET #1

Using your first aid knowledge, describe below your actions beginning with the priorities of care.

Would you give first aid to the least injured person so that they could help you in treating others or would you go directly to the most injured person and begin emergency first aid care? After you decide which person you would give aid to, describe each person's care. Place the number next to the person you would care for first, second, third, fourth, fifth, and sixth.

Man A--

Man B--

Man C--

Woman D--

Woman E--

ASSIGNMENT SHEET #1

Woman F--

After you describe your care, divide into groups or share your work with the class. Be able to explain your reasons for choosing your priorities of care.

FIRST AID
UNIT III

ASSIGNMENT SHEET #2--DESCRIBE TREATMENT FOR POISONOUS INSECT BITES

Using resource materials provided, describe below first aid treatment given for various types of wounds caused by poisonous insects.

1. Stings from ants, bees, wasps, hornets, and yellow jackets

   (NOTE: Many persons are highly allergic to this venom.)

   ____

   ____

   ____

   ____

2. Ticks

   ____

   ____

   ____

   ____

3. Spiders

   (NOTE: The most dangerous spiders are the black widow and the brown recluse. Tarantulas also carry a venom which produces allergic reactions in some humans.)

   ____

   ____

   ____

   ____

   ____

   ____

ASSIGNMENT SHEET #2

4. Scorpions

FIRST AID
UNIT III

JOB SHEET #1--CONTROL BLEEDING BY DIRECT PRESSURE

(NOTE: A victim may suffer shock and loss of consciousness from loss of blood. Because it is possible to bleed to death in a very short period of time, bleeding should be brought under control as soon as possible.)

I. Equipment

A. Dressings, sterile or as clean as possible

Examples: Prepared gauze dressings, clean handkerchief, clean articles of clothing

B. Bandages

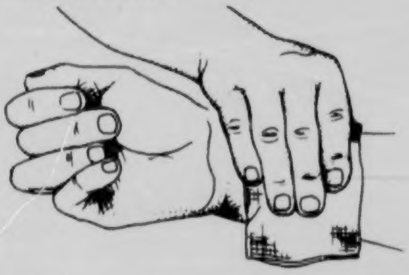
Examples: Rolls of prepared gauze in different widths and lengths; strips of clean clothing

II. Procedure

A. Apply dressing to area using firm pressure with hand (Figure 1)

(NOTE: In some cases the bare hand has to be used until suitable dressing or compress can be found.)

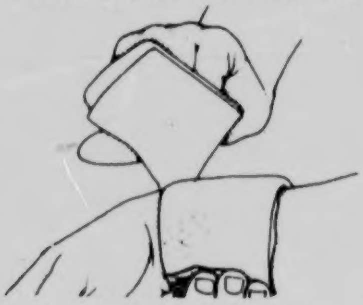
FIGURE 1



B. Check frequently to see if bleeding has stopped or has slowed (Figure 2)

(CAUTION: Do not disturb clots after they have formed. If blood soaks through cloth do not remove but add more layers of dressing.)

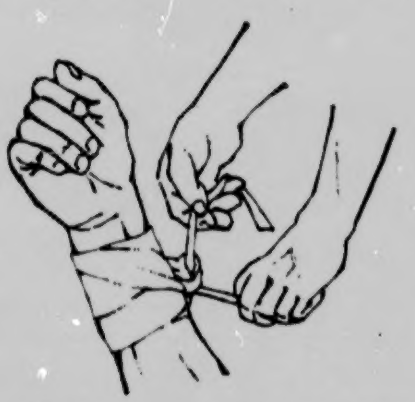
FIGURE 2



JOB SHEET #1

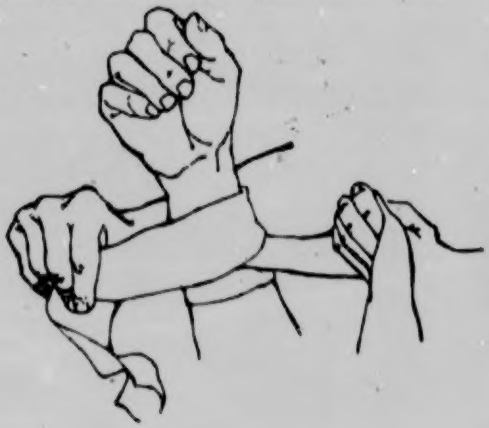
C. Apply a pressure bandage if bleeding is still active by holding the dressing in place with one hand, wrapping bandage directly over and around the injured area, and tying the knot over the wounded area (Figure 3)

FIGURE 3



(NOTE: Use firm motion but do not wrap too tightly or circulation will be impaired. See Figure 4)

FIGURE 4



D. Elevate the limb, if possible, above the level of the victim's heart

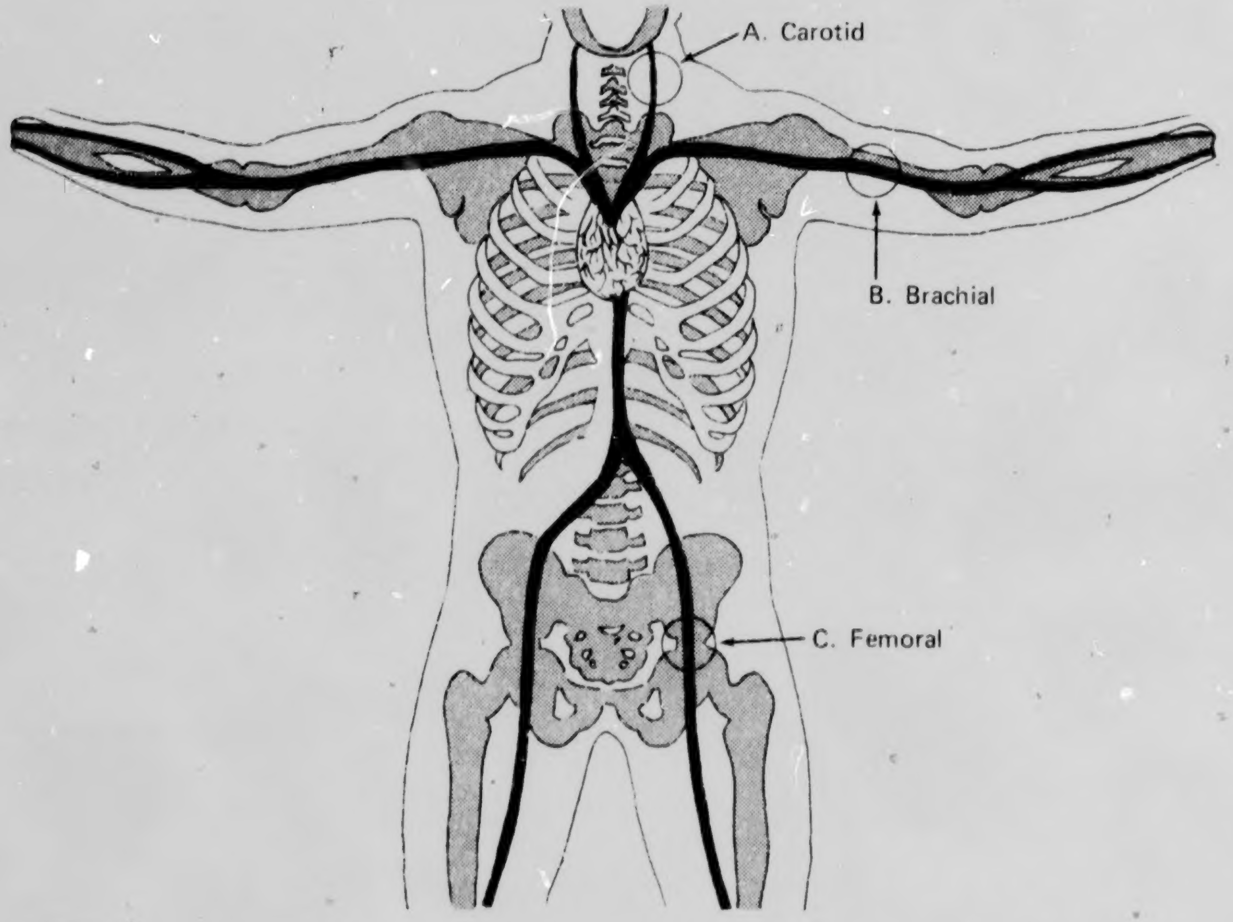
(NOTE: This can be done if no apparent fracture has occured in that limb.)

JOB SHEET #1

E. Apply pressure on the main artery that supplies blood to the injured area if bleeding continues

(NOTE: Refer to diagram for pressure points to control bleeding in various areas. See Figure 5.)

FIGURE 5



F. Apply a tourniquet only as a last resort; MAKE SURE that the victim will be seen by a physician as soon as possible

(NOTE: Refer to Job Sheet #2 for applying a tourniquet.)

FIRST AID
UNIT III

JOB SHEET #2--APPLY A TOURNIQUET

(CAUTION: Using a tourniquet is dangerous. In cases of severe hemorrhage that can't be controlled by other means, a tourniquet may be used. Once a tourniquet is applied, the patient must be seen by a physician as soon as possible. When a tourniquet is decided upon, consideration of the risk of losing a limb in order to save a life must be taken.)

I. Equipment

A. Strip of bandage or cloth at least two inches wide

B. Short strong stick or similar object that will not break

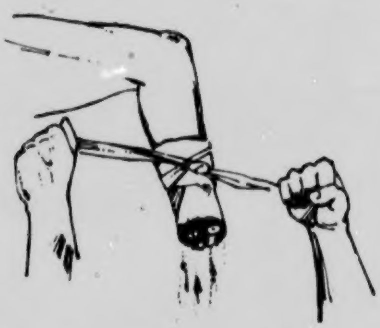
II. Procedure

A. Place tourniquet just above wound without touching wound areas

(NOTE: If injury is in joint area or just below, place tourniquet above joint.)

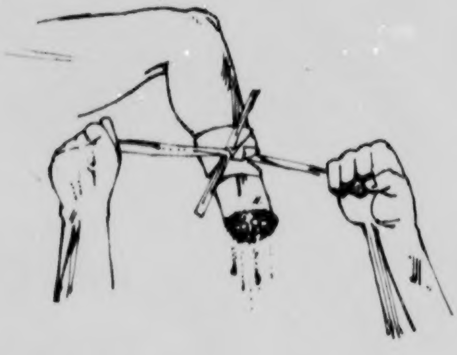
B. Wind cloth or bandage tightly around limb twice and tie a half knot (Figure 1)

FIGURE 1



C. Place a stick on overhand knot and tie two more knots on top of stick (Figure 2)

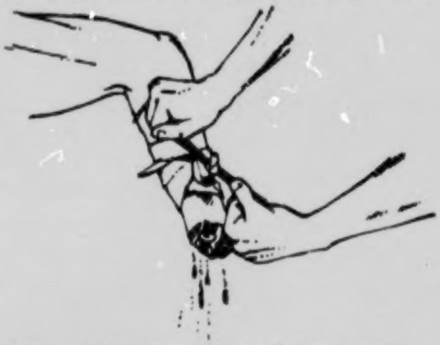
FIGURE 2



JOB SHEET #2

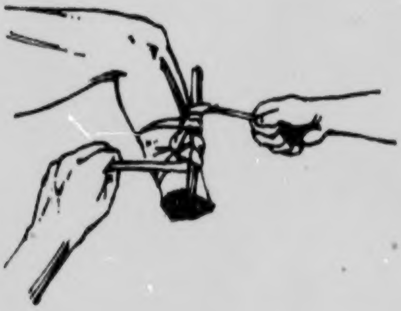
D. Turn stick to secure tourniquet until bleeding stops (Figure 3)

FIGURE 3



E. Fasten stick in place with loose ends of the tourniquet or a strip of cloth (Figure 4)

FIGURE 4



(CAUTION: DO NOT loosen a tourniquet once applied.)

F. Write a note telling the location of tourniquet and the time it was applied; fasten it to victim

G. DO NOT cover a tourniquet

FIRST AID
UNIT III

JOB SHEET #3--PERFORM CPR (CARDIOPULMONARY RESUSCITATION)

(NOTE: CPR should be done by a qualified person who has been effectively trained. Many lives could be saved if everyone knew how to perform cardio-pulmonary resuscitation.)

I. Equipment--To practice CPR, it is advisable to use the training mannequins that are actually equipped with "breathing" and "heartbeat" devices

(NOTE: These can be obtained from the Red Cross units or hospital inservice training programs.)

II. Procedure

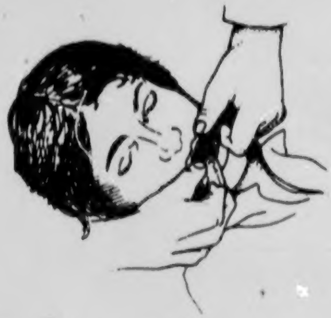
A. Establish open airway

(NOTE: The best accepted way to do this is mouth-to-mouth or mouth-to-nose method.)

1. Remove any foreign substance from the mouth (Figure 1)

(NOTE: If possible, use cloth to cover fingers.)

FIGURE 1

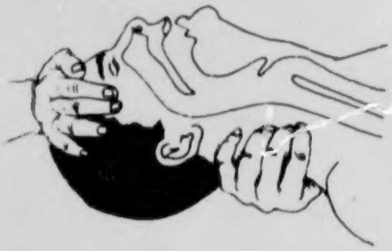


2. Position victim's head backward so that chin is pointing upward

3. Place one hand under victim's neck and lift; place heel of other hand on victim's forehead and move head backward (Figure 2)

(NOTE: In many cases this may open the airway and no other action would be needed.)

FIGURE 2



JOB SHEET #2

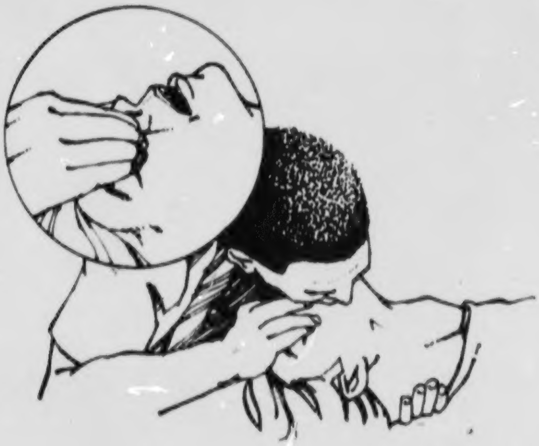
4. Hold victim's nostrils shut with the thumb and index finger of your hand that is on victim's forehead

   (NOTE: This will prevent leakage of air.)

5. Open your mouth widely, take a deep breath, and blow air into victim's mouth, making sure that there is a tight seal over victim's mouth (Figure 3)

   (NOTE: Provide at least one breath every five seconds for adults, or twelve per minute.)

FIGURE 3

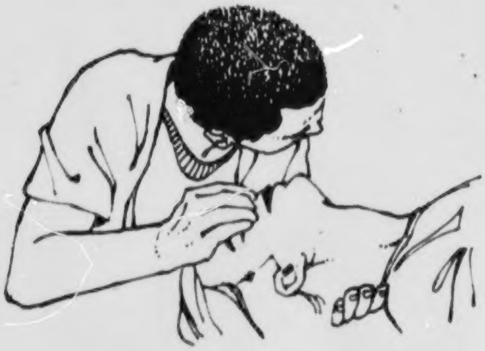


6. Check results by watching victim's chest to see if it rises and falls after breath

7. Stop blowing when victim's chest expands; turn your head to side and listen for exhaled air (Figure 4)

   (NOTE: Make sure exhalation takes place.)

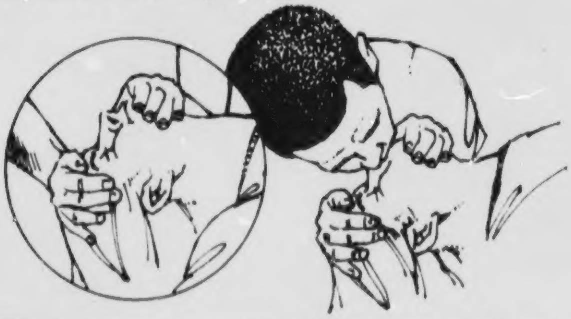
FIGURE 4



JOB SHEET #3

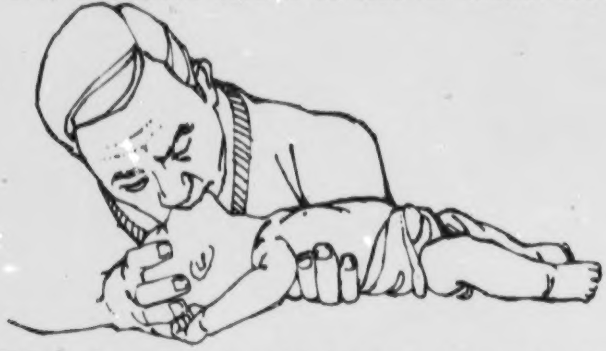
(NOTE: In some cases, it is necessary to use mouth-to-nose breathing. The backward tilt of head is used, but victim's mouth is closed. A tight seal is made by the mouth over victim's nose and air is blown in. For exhalation, the mouth is opened to allow air to escape. See Figure 5.)

FIGURE 5



(NOTE: In infants or young children, the mouth and nose should be sealed by the mouth and a breath should be blown in every three seconds with less pressure and volume than used for the adult. Only small puffs need to be used for infants. See Figure 6.)

FIGURE 6



(CAUTION: If exchange is not being made, be sure to check for airway obstruction. If necessary, turn the adult to side and administer sharp blows between the shoulder blades to shake the material free. A child may be suspended for a moment by the ankles or turned upside down over one arm and given two or three sharp blows between the shoulder blades. See Figures 7 and 8.)

FIGURE 7

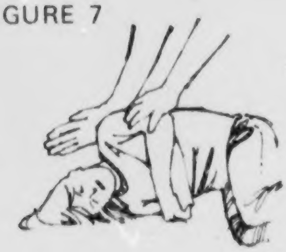
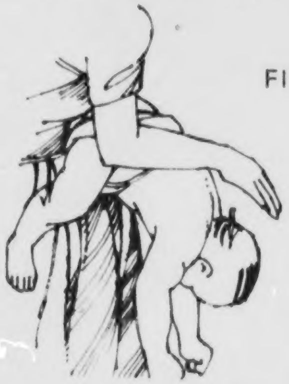


FIGURE 8



JOB SHEET #3

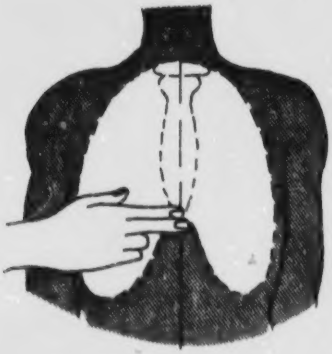
B. Begin external cardiac massage

(CAUTION: This procedure should also be practiced on one of the mannequins designed for CPR training.)

(NOTE: Artificial circulation can be provided by giving external cardiac compression that can force the heart to pump blood.)

1. Kneel at victim's side near chest
2. Locate the lowest part of the sternum (breast bone) called the xiphoid (Figure 9)

FIGURE 9



3. Place heel of one hand about 1"-1 1/2" away from that tip (Figures 10 and 11)

FIGURE 10

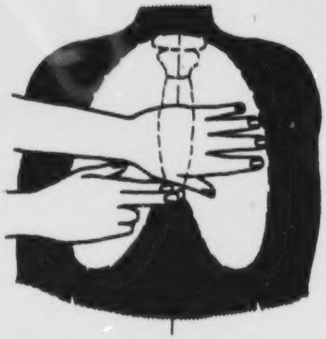
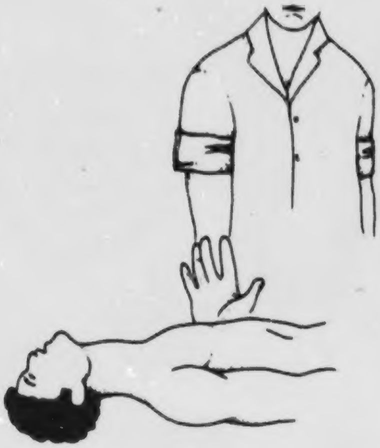


FIGURE 11



(NOTE: Make sure you use only the heel of the hand because to use all of the hand might exert more pressure than needed, resulting in injury to ribs.)

JOB SHEET #3

4. Place your other hand on top of the one that is in position; be sure to keep fingers off the chest wall (Figures 12 and 13)

   (NOTE: Interlacing of fingers will keep this from happening.)

FIGURE 12

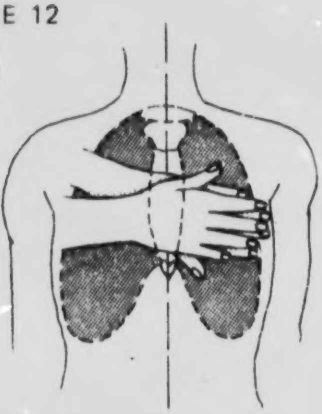
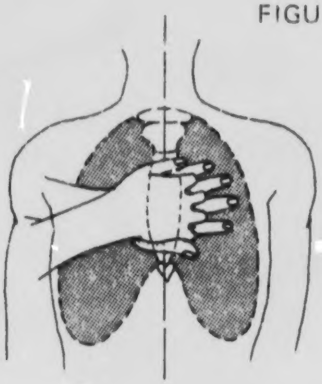
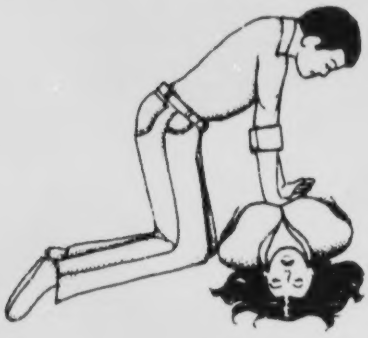


FIGURE 13



5. Bring shoulders directly over victim's sternum, keeping your arms straight, and compress downward (Figure 14)

FIGURE 14



6. Depress sternum about 1 1/2"-2" for an adult victim

   (NOTE: Cardiac compression is different for small children and infants. Only one hand is needed for compression with the other hand slipped under the child's back for support. Use only tips of index and middle fingers for infants and depress mid-sternum 1/2"-3/4" at a rate of eighty to one hundred times a minute. For small children, use the heel of one hand and depress 3/4"-1 1/2" at a rate of eighty to one hundred times per minute. Breaths should be given after every fifth compression.)

JOB SHEET #3

7. Without removing your hands from the victim's body, relax after each compression using a rhythmical, rocking motion, allowing chest to return to normal position after compression

   (NOTE: If you are the only rescuer, you have to provide breathing and cardiac compression. Use the ratio fifteen cardiac compressions to two breaths. The rate of compressions should be approximately eighty times per minute. If there are two rescuers, the ratio should be five cardiac compressions to one breath and rate of cardiac compressions should be approximately sixty per minute.)

FIRST AID
UNIT III

JOB SHEET #4--APPLY DRESSINGS AND BANDAGES

I. Equipment

A. Dressings, gauze or cloth

(NOTE: Sterile dressings need to be used if possible; if not available, freshly laundered cloths, such as handkerchiefs, towels, sheets, pillowcases, or napkins, may be used.)

B. Bandages

1. Gauze, usually found in rolls of ten yards and one, two, or three inches in width

   (NOTE: Manufacturers have developed a type of bandage that clings or holds to dressing more securely than the older type.)

2. Elastic in various widths and lengths

3. Triangular bandages, usually of muslin to be used as slings or folded for absorbent pressure pads

   (NOTE: Bandages can be held in place with adhesive, plastic or masking tape, paper tape, safety pins, or clips. Gauze and muslin bandages can be split and tied.)

C. Adhesive strips

(NOTE: Adhesive strips can be obtained in most any size. They are a good wound cover as they are sterile, have telfa-covered gauze pads, and an adhesive strip to secure the covering. Many of the adhesive strips are medicated with an appropriate antibacterial substance.)

D. Butterfly bandages

(NOTE: These are strips of adhesive with a middle section of telfa-covered pad that are used to close wounds that do not need to be sutured but need to be supported until healing takes place. They can be manufactured or made from adhesive strips.)

JOB SHEET #4

II. Procedure

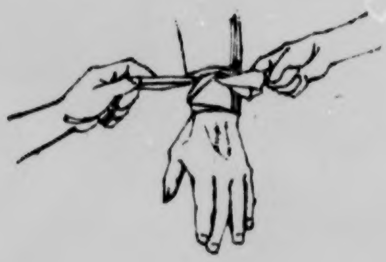
(NOTE: A bandage should be snug over a dressing but not tight enough to interfere with circulation. Be sure to watch for swelling, changes of color and coldness of tips of fingers or toes, and listen for complaints of numbness or tingling.)

A. Circular bandaging

(NOTE: Gauze, cloth, or elastic wrap may be used to secure dressing.)

1. Position dressing and anchor the bandage
2. Wrap the area by encircling each layer with the next on top
3. Secure by tape, pins, clips, or splitting and tying a knot (Figure 1)

FIGURE 1

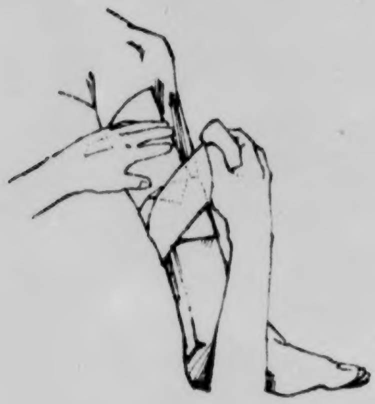


B. Spiral bandaging

(NOTE: Gauze, cloth, or elastic ace wrap may be used to secure dressing.)

1. Anchor bandage over dressing (Figure 2)

FIGURE 2

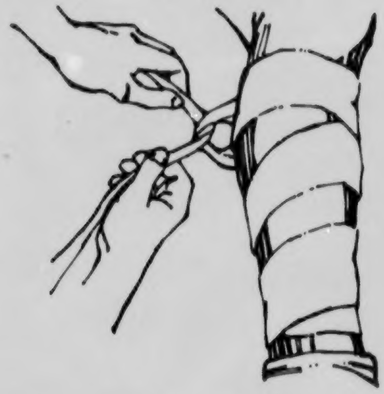


JOB SHEET #4

2. Encircle the area by making spiral turns of the bandage moving around the limb until dressing is covered

3. Secure the bandage by tying it off if possible; this makes it more supportive than tape or clips; if using an elastic wrap, clips can be used effectively (Figure 3)

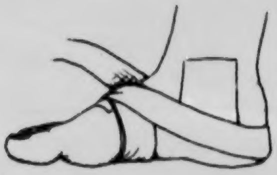
FIGURE 3



C. Figure of eight bandage for ankle

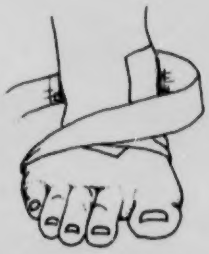
1. Position the bandage end under the instep of the foot and make two or three additional turns around the foot (Figure 4)

FIGURE 4



2. Bring the bandage up across the foot, then around the ankle, downward across the front of the foot, and across under the arch (Figure 5)

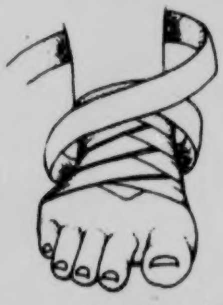
FIGURE 5



JOB SHEET #4

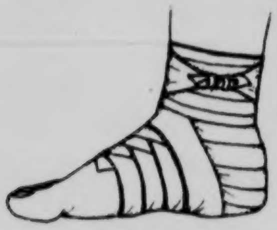
3. Make several of the figure of eight turns, each turn overlapping the previous one by about two-thirds the width of the bandage; to give more support give two occasional turns around the ankle (Figure 6)

FIGURE 6



4. Tie off ends or use clips with elastic bandage (Figure 7)

FIGURE 7



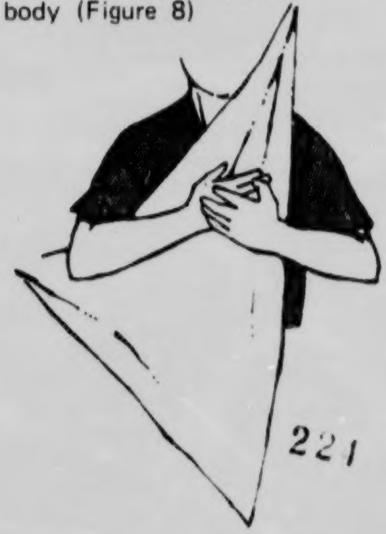
(NOTE: This type of bandage is effective for ankles and wrists. It is quite supportive to the injured limb.)

D. Triangular sling

(NOTE: Triangular cloth needs to be approximately 55" across the base and from 30"-40" along the sides. These can be bought from a manufacturer or can be homemade from towels or sheets.)

1. Place one end of the triangular cloth over the uninjured shoulder and let the other end hang down in front of the chest, parallel to the body (Figure 8)

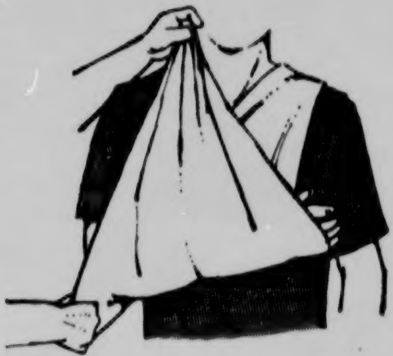
FIGURE 8



JOB SHEET #4

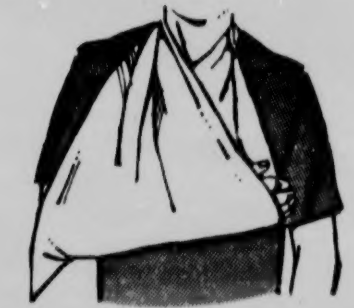
2. Put pointed end behind the elbow of injured arm (Figure 9)

FIGURE 9



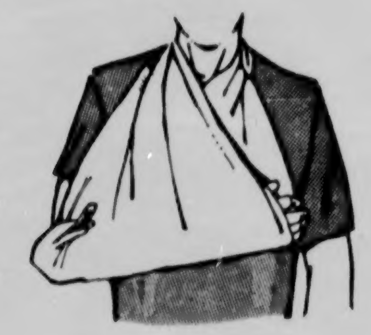
3. Pull the second end of the bandage up over the shoulder and tie the two ends together at the side of the neck; do not tie over the spine (Figure 10)

FIGURE 10



4. Carry point of cloth forward and pin it to the front of the sling (Figure 11)

FIGURE 11

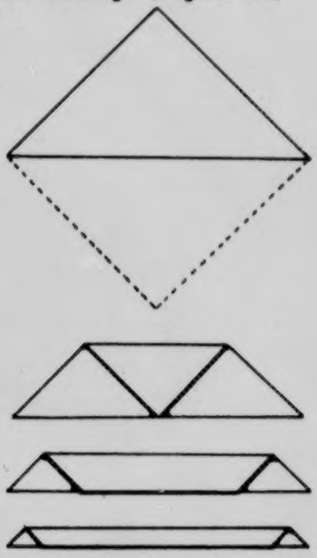


JOB SHEET #4

E. Triangular folded as cravat

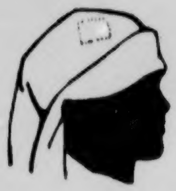
1. Fold triangular bandage (Figure 12)

FIGURE 12



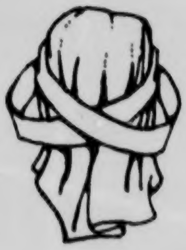
(NOTE: For scalp and forehead injuries, leave the point hanging down the victim's back. See Figure 13.)

FIGURE 13



2. Carry the two ends around the head above the ears and cross them just below the bump at the back of the head (Figure 14)

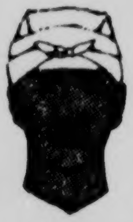
FIGURE 14



JOB SHEET #4

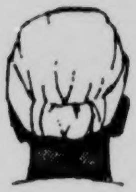
3. Carry the ends securely to the front of the head and tie over the forehead (Figure 15)

FIGURE 15

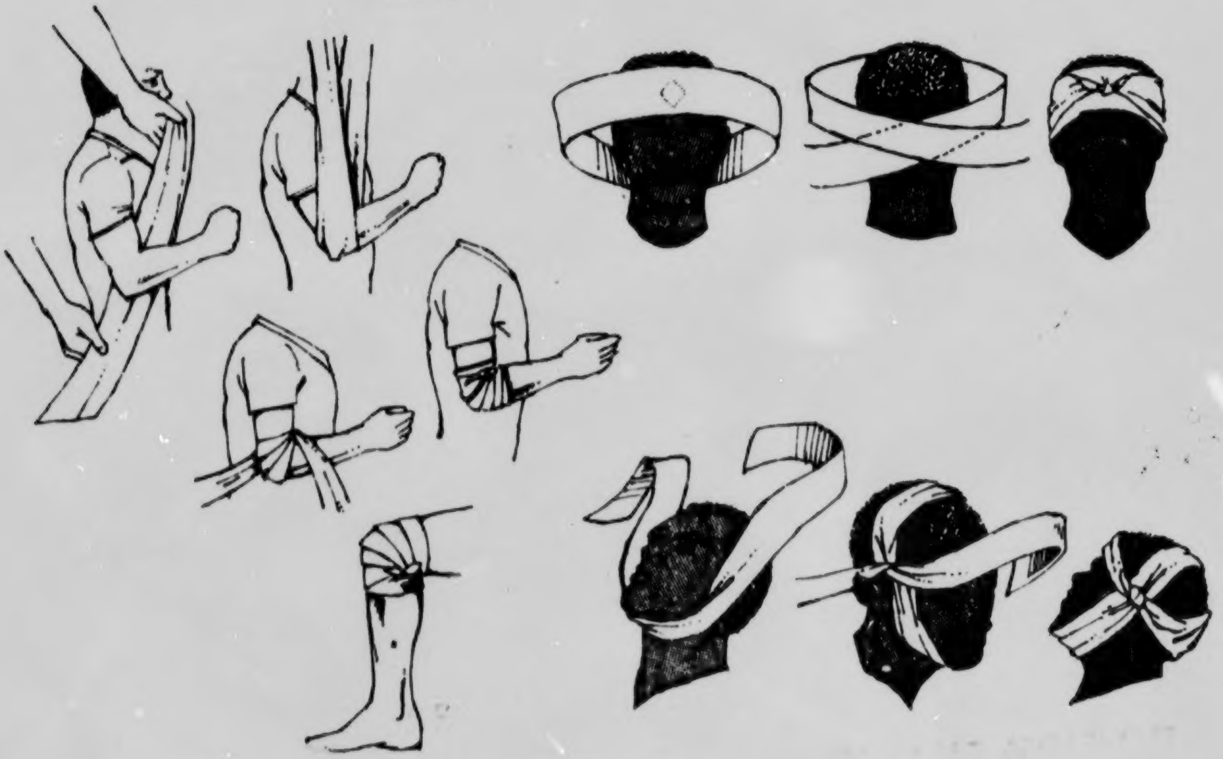


4. Pick up the point of the bandage at the back of the head and tuck it securely into the bandage (Figure 16)

FIGURE 16



(NOTE: The triangular bandage can be folded to fit many different areas and can be secured quite firmly. See examples below.)



FIRST AID
UNIT III

JOB SHEET #5--APPLY A SPLINT

(NOTE: Many splints are commercially made but in emergency situations, many materials can be used to support injured area while victim is being transported.)

I. Equipment

  A. Blankets or towels

  B. Strips of cloth, towels, or sheets torn into strips

  C. Straight sticks or smooth pieces of wood

  D. Rolled up newspapers

  E. Pillows

II. Procedure

(NOTE: When a fracture is suspected, do not try to move the victim or try to put bone fragments back into place. Do try to keep the victim in good body posture. Signs of fracture may be obvious deformities, swelling, discoloration, pain, or tenderness to touch. If there is an open fracture, there will be obvious bone parts protruding. If in doubt about a fracture, assume there is one and treat with care.)

  A. Splints for broken arms

    1. Place arm in as comfortable position as possible without trying to replace bone fragments

    2. Support fracture area with cardboard, small board, or rolled up newspapers (Figures 1 and 2)

FIGURE 1

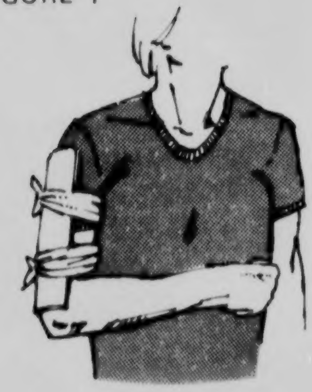
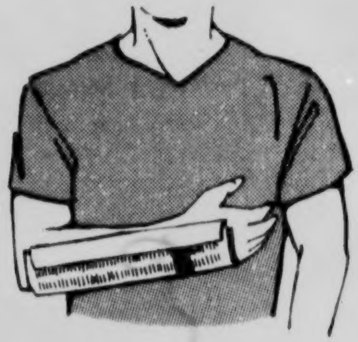


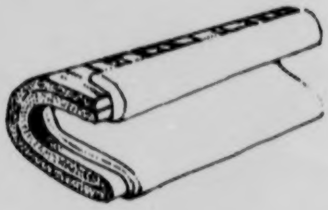
FIGURE 2



JOB SHEET #5

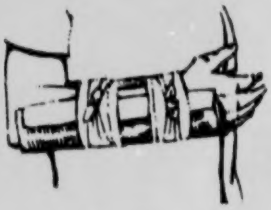
(NOTE: If possible, pad injured limb with soft c[illegible]oth. See Figure 3)

FIGURE 3



3. Secure with strips of cloth and tie double knots (Figure 4)

FIGURE 4



4. Support whole arm with sling

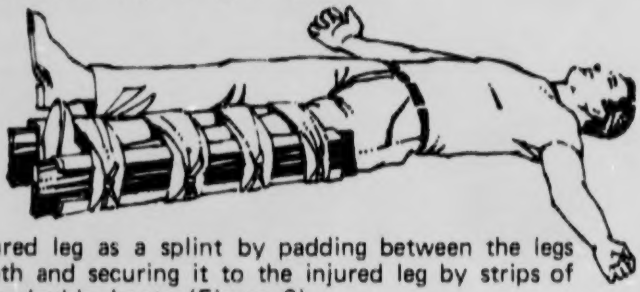
B. Splints for broken legs

1. Place leg in as straight a position as possible

2. Use splints of wood or blanket roll to keep leg from moving, being sure not to constrict circulation

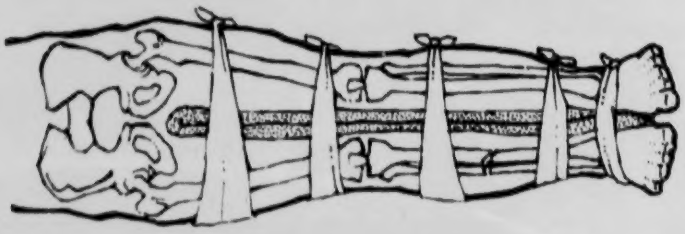
3. Secure the splint by wrapping strips of cloth around splint and leg and tying a double knot (Figure 5)

FIGURE 5



4. Use the uninjured leg as a splint by padding between the legs with a soft cloth and securing it to the injured leg by strips of cloth tied with double knots (Figure 6)

FIGURE 6

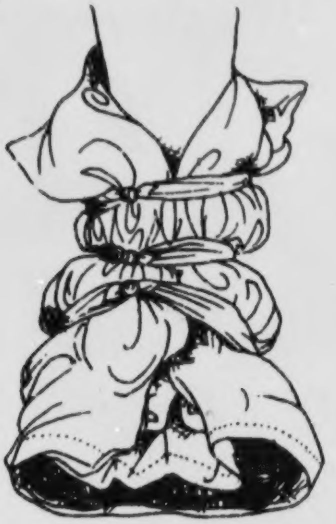


JOB SHEET #5

C. Splint for broken ankle and foot

1. Remove shoe and sock if possible
2. Splint with a pillow or blanket and secure with strips of cloth (Figure 7)

FIGURE 7



3. Apply cold compresses if swelling has occurred

D. Splint for fractured back or neck

(CAUTION: Do not attempt to move victim or try to lift any body part until adequate help arrives. Use some type of support for whole body if available. Use car door, seat, or hood if available to transport victim. Be sure that body is fully supported by adequate assistance. If none is available, it is better to wait until qualified medical help with special equipment arrives.)

FIRST AID
UNIT III

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with first aid to their correct definitions by placing the appropriate numbers in the blanks provided.

______a. Cut or wound made with sharp instrument

______b. Decrease in amount of oxygen and increase in amount of carbon dioxide in the body as a result of some interference with respiration

______c. Tearing away forcibly of body part or tissues

______d. Scraping away of a portion of skin or mucous membrane as a result of injury or by mechanical means; bleeding is slight and usually consists of slow oozing with only danger being infection

______e. Wound or irregular tear of flesh

______f. Protective cover placed over wound

______g. Abnormal internal or external discharge of blood; external symptom is obvious blood flow and internal symptom is shock

______h. Break in soft parts of body tissues which may be internal or external; caused by trauma or violence to areas of body

______i. Injury in which skin is not broken

______j. Agent which induces vomiting

______k. Substance that may affect body or mind when taken into the body or applied to its surface

1. Asphyxiation
2. Hemorrhage
3. Abrasion
4. Incision
5. Laceration
6. Wound
7. Avulsion
8. Contusion
9. Dressing
10. Drug
11. Emetic

______l. Strip of woven material used to hold wound dressing or splint in place; helps to immobilize, support, and protect injured body part

______m. Sudden, severe attack of illness

______n. Device that immobilizes injured part when fracture is suspected

______o. Breaking of a bone

______p. Condition resulting from ineffective circulation of blood and oxygen; characterized by symptoms of marked decrease in blood pressure, rapid pulse, and decreased kidney function

______q. Injury to muscle resulting from overstretching

______r. Importance of an action relative to other possible actions

______s. Involuntary attack causing victim to lose consciousness

______t. Any substance which interferes with normal physiological functions when taken into the body orally, inhaled, injected, or absorbed through the skin

______u. Substance which neutralizes poisons and their effects

______v. Trauma to a joint which causes pain and disability; may even result in torn ligaments

______w. Freezing or effect of extreme cold on parts of the body

______x. Sensation that may precede an epileptic seizure by several hours or only a few minutes; warns victim of attack

12. Fracture
13. Antidote
14 Priority
15. Strain
16. Sprain
17. Shock
18. Poison
19. Bandage
20. Frostbite
21. Stroke
22. Convulsion
23. Splint
24. Aura

2. Name reasons why knowledge of first aid is important.

a. ______________________________

b. ______________________________

c. ______________________________

3. Discuss reasons why first aid training is needed.

____

____

____

____

4. Arrange in order actions to take when giving first aid by placing a "1" for the first step, a "2" for the second step, and so on in the blanks provided.

______a. Observe for pupil reactions of the eyes

______b. Check breathing

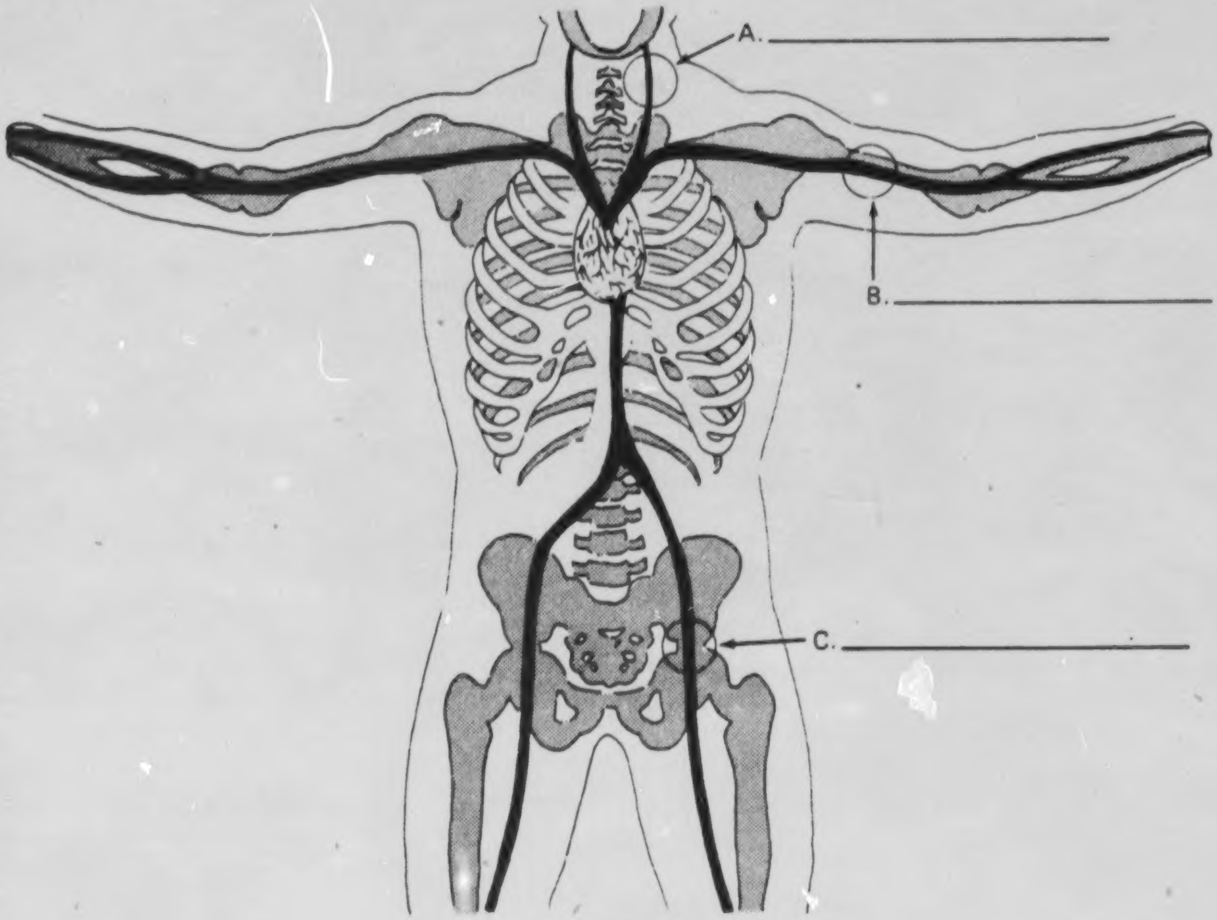
______c. Begin definite first aid treatment for symptoms

______d. Observe overall emergency

______e. Check alertness level if victim is conscious by asking questions about physical status

______f. Check pulse or heartbeat

5. Identify major vessel pressure points to be used when attempting to control bleeding.



6. Describe care given to victim with a bite wound.

______

______

______

______

7. Select from the list below factors to consider in treating a victim with an eye injury by placing an "X" in the appropriate blanks.

_____a. Remove foreign object immediately using any available instrument

_____b. Do not let victim rub eye

_____c. Put victim in chair

_____d. Cover eye with a clean dressing if foreign object is lodged in eye and can not be removed easily with flushing of water or by using a clean cloth

8. Select from a list symptoms to observe for brain damage. Place an "X" in the appropriate blanks.

_____a. Convulsions

_____b. Bleeding from nose, ear canal, or mouth

_____c. Pupils equal in size

_____d. Clear speech patterns

_____e. Consciousness

_____f. Incontinence

9. Match types of treatment given for poison ingestion to the correct poisonous substance by placing the appropriate numbers in the blanks provided.

_____a. Give appropriate antidote; induce vomiting by variety of methods	1. Strong acid
_____b. Neutralize substance with a dose of milk of magnesia and a glass of diluting fluid, such as milk or water; do not induce vomiting	2. Noncorrosive substance

10. Select from the list below factors to consider in treatment of shock by placing an "X" in the appropriate blanks.

_____a. Get medical help as soon as possible

_____b. Help victim sit up immediately

_____c. Cover victim completely

_____d. Give victim fluids immediately

_____e. Maintain adequate supply of oxygen (O_2)

11. Describe first aid given for contact poisoning.

____

____

____

____

____

____

____

12. Select from the list below major causes of poisoning by placing an "X" in the appropriate blanks.

_____a. Drug overdoses

_____b. Use of home remedies

_____c. Use of artificial or synthetic substances

_____d. Medicines left within reach of children

_____e. Natural food products

_____f. Improper use of poisonous spray substances

_____g. Poisonous substance transferred from the original labeled container and put into common household containers

13. Select from the list below causes of respiratory failure by placing an "X" in the appropriate blanks.

_____a. Allergic reactions

_____b. Atmospheric balance

_____c. Fainting

_____d. Obstruction by foreign object

_____e. Respiratory tract disorders

_____f. Excessive smoking

14. Arrange in order actions to take when victim is bitten by a poisonous snake. Place a "1" for first action, a "2" for second action, and so on in the appropriate blanks.

______a. Apply ice pack if possible

______b. Apply a constricting band tightly enough to slow circulation, but not tightly enough to cut it off completely

______c. Keep victim as quiet as possible with affected area lower than the victim's heart

15. Match terms associated with drugs and their use to their correct definitions by placing the appropriate numbers in the blanks provided.

______a. Drugs used to increase mental activity and to offset exhaustion

______b. Volatile substances that cause an intoxicated feeling when purposely breathed

______c. Excessive or persistent use of a drug without medical regulation

______d. Drugs which depress central nervous system and are usually habit-forming; controlled by government

______e. Use of drugs for effects or conditions that are not properly suited, or for correct purposes but administering or taking an incorrect dose

______f. Drugs which depress nervous system and body functions, producing relaxation and sleep

______g. Drugs used to reduce mental stress and excitement without interfering with normal mental activity

______h. Drug that produces bizarre mood changes which produce disturbances of thoughts, emotions, sensations; illusions; delusions

______i. Compulsive desire to take drug to experience its effect or to avoid discomfort in its absence

1. Drug misuse
2. Drug abuse
3. Drug dependence
4. Hallucinogen
5. Stimulants (uppers)
6. Tranquilizers
7. Narcotics
8. Depressants
9. Inhalants

16. Complete the chart below on symptoms and treatment for types of drug overdose or abuse.

DRUG	SYMPTOMS	TREATMENT
Alcohol	Feelings of exhilaration but reduced mental and physical alertness; in severe stages, decreased respirations and possible coma	a. ________ ________ ________ ________
Marijuana	b. ________ ________ ________ ________ ________	No emergency treatment unless victim is very disoriented and has psychotic reaction
c. ________	Decrease in breathing possibly resulting in coma; reduction of mental and physical activity; possible death when mixed with alcohol	Maintain body temperature and open airway; get victim to hospital at once
Hallucinogens	d. ________ ________ ________ ________	Talk the person down in calm tones; transport to hospital as soon as possible
e. ________	Irritation of respiratory tract, unsteadiness; excitement at first, then depression that can lead to unconsciousness	If bag has been used, remove at once; give respiratory assistance if breathing has stopped and get to hospital immediately
Narcotics	Reduction in activity and awareness, decrease in breathing, profuse sweating, fall in temperature, constriction of pupils, nausea and vomiting, sleep, and possible coma	f. ________ ________ ________ ________ ________ ________ ________
Stimulants	g. ________ ________ ________ ________ ________ ________	Protect from injury; maintain open airway and normal body temperature; obtain help for psychiatric disorders
h. ________	Decrease in body temperature, blood pressure; respiratory depression; deepening state of unconsciousness	Arouse the victim maintain open airway and get victim to hospital as soon as possible

17. Classify burns by degree according to their descriptions by placing a "1" for first degree burns, a "2" for second degree burns, and a "3" for third degree burns in the blanks provided.

______a. Blistering

______b. Rapid healing

______c. Mottled or red areas

______d. Charred or a white casted appearance

______e. Damage extending into the first layer of tissue

______f. Redness or discoloration

______g. Mild swelling and pain

______h. Pain greater than first degree

______i. Considerable swelling

______j. Deep tissue destruction

______k. Wet appearance of burned area due to loss of plasma

______l. Less pain due to nervous tissue destruction

18. Match first, second, and third degree burns with their correct treatments.

______a. Submerge the part in cold but not ice water until pain subsides; blot dry gently and apply dry sterile dressings; do not break blisters and do not use any antiseptic ointments, sprays, or home remedies on burned area	1. Third degree 2. First degree 3. Second degree
______b. Apply cold water or submerge burned area in cold water; apply a dry dressing if necessary	
______c. Cover burns with thick sterile dressings, but do not immerse in water; do not remove any tissue or burned clothing; transport victim to hospital as quickly as possible	

19. Select from the list below signs of symptoms of heart attack by placing an "X" in the appropriate blanks.

______a. Disturbance of speech

______b. Shock symptoms (in most cases)

______c. Shortness of breath

______ d. Bleeding from nose, ear canal, or mouth

______ e. Persistent chest pain, usually under sternum, which frequently radiates to one or both shoulders or arms and to neck, jaw, or both

______ f. Convulsions

______ g. Rash

______ h. Bluish discoloration or pallor of lips, skin, and nail beds

______ i. Painful urination

20. Select from a list signs and symptoms of fainting by placing an "X" in the appropriate blanks.

______ a. Bleeding

______ b. Nausea

______ c. Vertigo

______ d. Temperature

______ e. Extreme pallor

______ f. Visual disturbances

______ g. Chest pain

______ h. "Cold sweats"

______ i. Numbness and tingling of extremities

21. Match types of seizures to their correct descriptions by placing the appropriate numbers in the blanks provided.

______ a. Often preceded by a sensation called an *aura*; victim becomes unconscious; muscle spasms occur; salivation increases; coma-like state occurs

______ b. Seizure activity consists of periods of momentary unconsciousness; eyes will stare, then blink; usually lasts only a few seconds each time

______ c. Seizure activity is limited to one side of body or various groups of muscles

1. Grand mal
2. Petit mal
3. Jacksonian

22. Determine priority of care in emergency situation.

23. Describe treatment for poisonous insect bites.

24. Demonstrate the ability to:

    a. Control bleeding by direct pressure.

    b. Apply a tourniquet.

    c. Perform CPR (cardiopulmonary resuscitation).

    d. Apply dressings and bandages.

    e. Apply a splint.

FIRST AID
UNIT III

ANSWERS TO TEST

1. a. 4
   b. 1
   c. 7
   d. 3
   e. 5
   f. 9
   g. 2
   h. 6
   i. 8
   j. 11
   k. 10
   l. 19
   m. 21
   n. 23
   o. 12
   p. 17
   q. 15
   r. 14
   s. 22
   t. 18
   u. 13
   v. 16
   w. 20
   x. 24

2. a. May mean the difference between life and death

   b. May mean the difference between temporary and permanent injuries

   c. Trains one in what to do and what not to do in an emergency

3. Discussion should include:

   a. Accidents are the number one cause of death

   b. There may not be time to wait for professional medical help after an accident

   c. Safety awareness needs to be promoted in the home, at work, and at play

4. a. 4

   b. 2

   c. 6

   d. 1

   e. 5

   f. 3

5. a. Carotid

   b. Brachial

   c. Femoral

6. Description should include:

   a. Cleanse wound thoroughly

   b. Seek medical attention immediately if face or neck has been bitten

   c. Restrain any animal that you may suspect of having rabies or to which you are not sure a rabies vaccine has been given

   d. Apply a dressing and avoid movement of injured area until seen by a doctor

7. b, d

8. a, b

9. a. 2

   b. 1

10. a, e

11. Description should include:

    a. Take off all clothing that has been exposed to substance and flush all areas thoroughly with water

    b. Find source of irritation to determine what type of treatment is needed

    c. Apply mild lotion, such as calamine, if rash occurs

    d. Seek medical attention immediately if respiratory symptoms such as difficulty in breathing or wheezing occur

12. a, d, f, g

13. a, d, e

14. a. 3

    b. 2

    c. 1

15. a. 5
  b. 9
  c. 2
  d. 7
  e. 1
  f. 8
  g. 6
  h. 4
  i. 3

16. a. Treat according to severity of symptoms; if intake produces symptoms of shock, treat for shock
  b. Occasional dizziness, uncoordination, increased heart rate, reddening of eyes, throat irritation
  c. Depressants
  d. Increased heart rate, blood pressure, and temperature; dilated pupils; paranoid delusions; hallucinations; and a complete loss of emotional control
  e. Inhalants
  f. Arouse the victim; maintain open airway and normal body temperature, seek medical help immediately
  g. Confusion, disorganization, irritability, fear, aggressive and antisocial behavior, delusions, and hallucinations
  h. Tranquilizers

17. a. 2
  b. 1
  c. 2
  d. 3
  e. 2
  f. 1
  g. 1
  h. 2
  i. 2
  j. 3
  k. 2
  l. 3

18. a. 3
  b. 2
  c. 1

19. b, c, e, h
20. b, c, e, f, h, i
21. a. 1
    b. 2
    c. 3
22. Evaluated to the satisfaction of the instructor
23. Evaluated to the satisfaction of the instructor
24. Performance skills evaluated to the satisfaction of the instructor

MICROBIOLOGY
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to name vital functions of living organisms, select from a list factors influencing growth of organisms, and match classes of microorganisms to their correct definitions. The student also should be able to sketch pictures of microorganisms from a prepared culture. This knowledge will be evidenced through completion of the assignment sheet and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with microbiology to their correct definitions.
2. Name vital functions of living organisms.
3. Select from a list factors influencing growth of microorganisms.
4. Match classes of microorganisms to their correct definitions.
5. Select from a list diseases caused by protozoa.
6. Classify types of fungi and diseases caused by them.
7. Name diseases caused by rickettsiae.
8. Select from a list diseases caused by viruses.
9. Name the common parasitic helminths or worms which may infest the human organism.
10. Distinguish between classes of bacteria.
11. Sketch pictures of microorganisms from prepared cultures.

MICROBIOLOGY
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and assignment sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information sheet.

   F. Collect slides of various types of bacteria.

      (NOTE: Biology instructor may be able to help locate slides.)

   G. Take field trip to a laboratory.

   H. Invite a resource person to speak for HOSA meetings on various careers in the laboratory or research fields, such as laboratory technicians, medical technologists, and pathologists.

   I. Discuss assignment sheet and provide materials.

   J. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Protozoa

      2. TM 2--Fungi

      3. TM 3--Bacteria

      4. TM 4--Rickettsiae and Viruses

      5. TM 5--Metazoa (Helminths)

      6. TM 6--Protozoan Infections

   D. Assignment Sheet #1--Sketch Pictures of Microorganisms from Prepared Cultures

E. Test

F. Answers to test

III. Unit references:

A. Culver, Vivian M. *Modern Bedside Nursing*. Philadelphia, Pennsylvania: W. B. Saunders Company, 1969.

B. Rogers, Helen. *Nursing I: A Course of Study*. Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

C. Thomas, Virginia. *Life Sciences for Health Technologies.* Los Angeles, California: Technicourse, Inc., 1970.

D. Thompson, Ella M., and Rosdahl, Caroline B. *Textbook of Basic Nursing.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1973.

IV. Additional references:

A. Oklahoma Council for Health Careers
P.O. Box 53151
Oklahoma City, OK 73105
(405) 271-5739

B. Filmstrip--"Infection Control Series." Available from Concept Media, P.O. Box 19542, Irvine, CA 92714.

MICROBIOLOGY
UNIT I

INFORMATION SHEET

I. Terms and definitions

- A. Microbiology--Study of microorganisms
- B. Microorganisms--Tiny living creatures of varying sizes and shapes which ordinarily cannot be seen with the naked eye
- C. Pathogen--Microorganism capable of causing disease
- D. Parasite--Organism that lives within, upon, or at the expense of another living organism known as the host
- E. Saprophyte--Organism that lives upon the dead remains of plants and animals
- F. Anaerobe--Microorganism which can live and grow only without oxygen
- G. Aerobe--Microorganism which can live and grow only in the presence of oxygen
- H. Helminth--Any animal, either free-living or parasitic, belonging to the worm family
- I. Chlorophyll--Green substance in plants which manufactures carbohydrates to use for energy
- J. Ultraviolet rays--Rays which cause tanning of the skin, production of vitamin D, and destruction of some organisms
- K. Optimum--Condition most favorable for growth or activity
- L. Molds--Multicellular plants which grow rapidly under favorable conditions
- M. Yeasts--Unicellular plants which reproduce by budding

II. Vital functions of living organisms

(NOTE: Each individual microorganism is able to carry out some or all of the vital functions characteristic of living organisms.)

- A. Metabolism
- B. Growth
- C. Reproduction

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INFORMATION SHEET

D. Irritability

E. Motion

F. Protection

III. Factors influencing growth of microorganisms

A. Darkness

(NOTE: Many microorganisms are very low forms of plant life which are colorless, contain no chlorophyll, and grow well in darkness. Many are killed by ultraviolet rays but are not affected by moderate light.)

B. Temperature

(NOTE: Optimum temperature for most microorganisms ranges from that of a cool room to slightly above normal human body temperature.)

C. Moisture

(NOTE: All microorganisms require some moisture for growth.)

D. Food

(NOTE: Most of the organisms discussed in this unit contain no chlorophyll and cannot manufacture their own food from raw materials.)

E. Oxygen supply

(NOTE: Some microorganisms are aerobic; others are anaerobic.)

IV. Classes of microorganisms (Transparencies 1, 2, 3, 4, and 5)

A. Protozoa--Single-cell animals capable of movement by various means

B. Fungi--Low forms of plant life lacking chlorophyll

C. Bacteria--Single-cell organisms considered to be colorless plants

D. Rickettsiae--Organisms smaller than bacteria but larger than viruses growing only within the cells of a living host

E. Viruses--Organisms unable to grow or reproduce until they have taken over a living cell

(NOTE: Viruses may be studied by direct observation with an electron microscope. Most of the information about them has been gained by studying their effects.)

INFORMATION SHEET

F. Metazoa--Multicellular animals whose cells become differentiated to form tissues

Example: Helminths

V. Diseases caused by protozoa (Transparency 6)

(NOTE: Diseases caused by protozoa are sometimes transmitted by insects.)

A. Amebic dysentery

(NOTE: Amebic dysentery is caused by Entamoeba histolytica.)

B. Malaria

(NOTE: Malaria is caused by several species of plasmodia.)

C. Trichomonas infection

(NOTE: Trichomonas may cause vaginitis.)

VI. Types of fungi and diseases caused by them (Transparency 2)

A. Molds

1. Ringworm

(NOTE: Ringworm is also known as tinea capitis.)

2. Athlete's foot

(NOTE: Athlete's foot is also known as tinea pedis.)

B. Yeasts

1. Thrush

2. Vaginitis

(NOTE: Thrush and vaginitis are also known as monilia or candida infections.)

VII. Diseases caused by rickettsiae

A. Rocky Mountain spotted fever

(NOTE: Rocky Mountain spotted fever is also known as Rickettsia rickettsii.)

B. Typhus

(NOTE: Typhus is also known as Rickettsia prowazekii or typhi.)

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INFORMATION SHEET

- C. Q fever

  (NOTE: Q fever is also known as Coxiella burnetii.)

VIII. Diseases caused by viruses

- A. Smallpox (variola)
- B. Chickenpox (varicella)
- C. Measles (rubeola)
- D. German measles (rubella)
- E. Influenza
- F. Infantile paralysis (poliomyelitis)
- G. Mumps (epidemic parotitis)
- H. Common cold (coryza)
- I. Fever blisters (herpes simplex)
- J. Shingles (herpes zoster)
- K. Rabies

IX. Common parasitic helminths or worms which may infest the human organism

- A. Roundworm
- B. Pinworm
- C. Hookworm
- D. Trichinella
- E. Flatworm

X. Classes of bacteria

- A. Nonpathogenic
  1. Essential for life
  2. Assist in decomposition of organic matter
  3. Aid in production of some foods and chemicals, such as cheeses, sauerkraut, cultured milk products, and lactic acid
- B. Pathogenic--Cause many diseases such as syphilis, gonorrhea, tuberculosis, typhoid and paratyphoid fevers, and whooping cough

Protozoa

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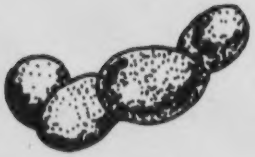
Fungi



Yeast Cells

Molds

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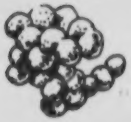
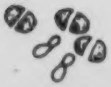
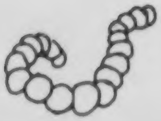
Bacteria



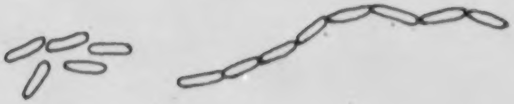
Staphylococci



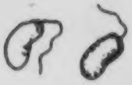
Diplococci



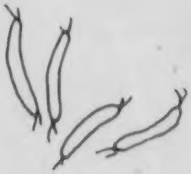
Streptococci



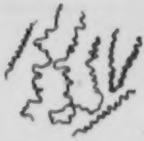
Bacilli (in Chains)



Vibrios



Spirilla



Spirochetes

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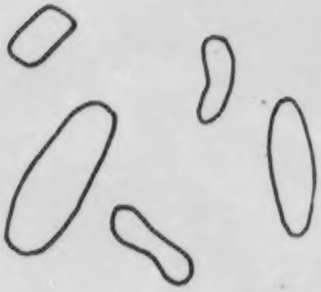
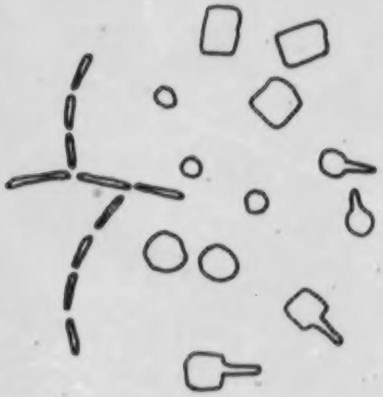
Rickettsiae and Viruses

(As Seen Under an Electron Microscope)



Rickettsiae



Viruses

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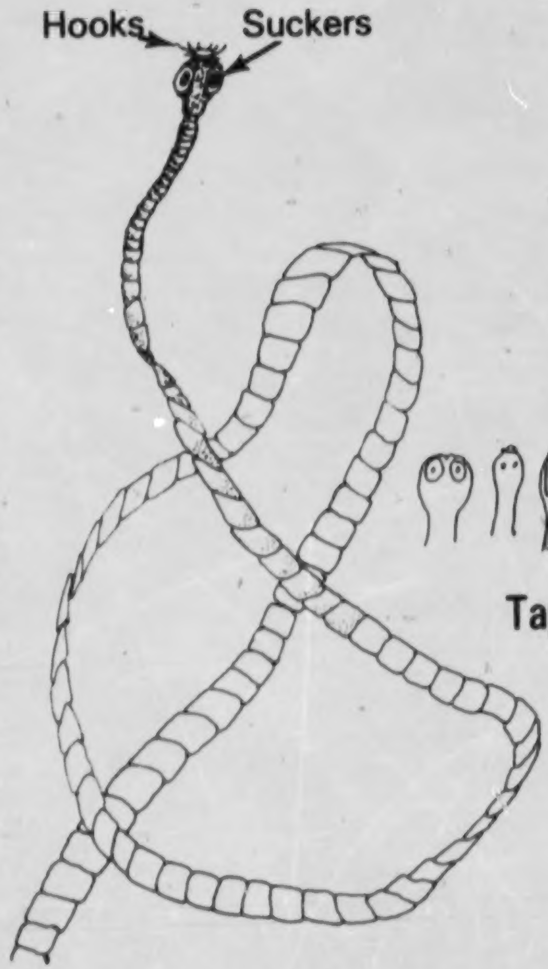
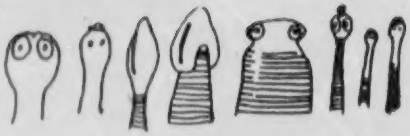
TM 4

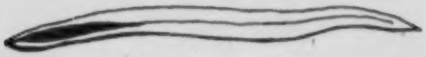
Metazoa

(Helminths)

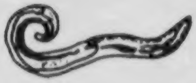




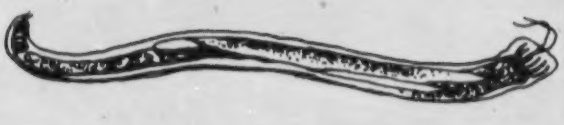
Tapeworm



Roundworm



Pinworm



Hookworm

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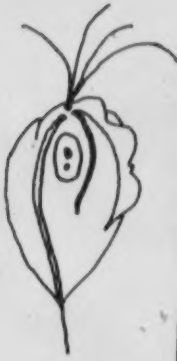
Protozoan Infections

Amebic Dysentery

(Entamoeba Histolytica)

Malaria

(Plasmodium Vivax)



Trichomonas Vaginalis

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MICROBIOLOGY
UNIT I

ASSIGNMENT SHEET #1--SKETCH PICTURES OF MICROORGANISMS FROM PREPARED CULTURES

Using agar plates or test tubes with appropriate medium, prepare a culture of microorganisms following instructions given by instructor.

1. Wash hands with soap and water
2. Place fingertips gently on medium or, using orange stick, clean beneath fingernail and place matter on medium
3. Identify plate as instructed

Growth will be incubated and returned to you.

Draw and describe below what kind of culture you see. If possible, borrow a microscope to view microorganisms.

Compare your observation with pictures of staphylococci, streptococci, diplococci, and others. Can you find any similarity?

MICROBIOLOGY
UNIT I

TEST

NAME ______________________________ SCORE ______________

1. Match terms to their correct definitions.

_____a. Condition most favorable for growth or activity

_____b. Rays which cause tanning of the skin, production of vitamin D, and destruction of some organisms

_____c. Microorganism capable of causing disease

_____d. Green substance in plants which manufactures carbohydrates to use for energy

_____e. Unicellular plants which reproduce by budding

_____f. Any animal, either free-living or parasitic, belonging to the worm family

_____g. Microorganism which can live and grow only in the presence of oxygen

_____h. Organism that lives within, upon, or at the expense of another living organism known as the host

_____i. Study of microorganisms

_____j. Microorganism which can live and grow only without oxygen

_____k. Organism that lives upon the dead remains of plants and animals

_____l. Multicellular plants which grow rapidly under favorable conditions

_____m. Tiny living creatures of varying sizes and shapes which cannot ordinarily be seen with the naked eye

1. Pathogen
2. Helminth
3. Chlorophyll
4. Microbiology
5. Ultraviolet rays
6. Parasite
7. Aerobe
8. Yeasts
9. Anaerobe
10. Optimum
11. Microorganisms
12. Saprophyte
13. Molds

2. Name vital functions of living organisms.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

3. Select from the list below factors influencing growth of microorganisms. Place an "X" in the appropriate blanks.

_____a. Chlorophyll

_____b. Activity

_____c. Darkness

_____d. Food

_____e. Oxygen supply

_____f. Temperature

_____g. Moisture

_____h. Noise

4. Match the classes of microorganisms on the right to their correct definitions. Place the correct numbers in the appropriate blanks.

_____a. Organisms unable to grow or reproduce until they have taken over a living cell

_____b. Low forms of plant life lacking chlorophyll

_____c. Organisms smaller than bacteria but larger than viruses growing only within the cells of a living host

_____d. Single-cell animals capable of movement by various means

_____e. Single-cell organisms considered to be colorless plants

_____f. Multicellular animals whose cells become differentiated to form tissues

1. Protozoa
2. Fungi
3. Bacteria
4. Rickettsiae
5. Viruses
6. Metazoa

5. Select from the list below diseases caused by protozoa. Place an "X" in the appropriate blanks.

_____a. Malaria

_____b. Trichinella

_____c. Trichomonas infection

_____d. Monilia infection

_____e. Amebic dysentery

6. Classify types of fungi and diseases caused by them. Place an "M" for the diseases caused by molds and a "Y" for the diseases caused by yeasts in the appropriate blanks.

_____a. Thrush

_____b. Athlete's foot

_____c. Ringworm

_____d. Vaginitis

7. Name diseases caused by rickettsiae.

a. ____

b. ____

c. ____

8. Select from the list below diseases caused by viruses. Place an "X" in the appropriate blanks.

_____a. Rabies

_____b. Measles (rubeola)

_____c. Typhus

_____d. Common cold (coryza)

_____e. Mumps (epidemic parotitis)

_____f. Q fever

_____g. Shingles (herpes zoster)

_____h. Monilia infection

_____i. Fever blisters (herpes simplex)

_____j. Influenza

_____k. Trichinella

_____l. Infantile paralysis (poliomyelitis)

_____m. Malaria

_____n. Chickenpox (varicella)

_____o. Smallpox (variola)

_____p. German measles (rubella)

9. Name common parasitic helminths or worms which may infest the human organism.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

10. Distinguish between classes of bacteria. Place an "N" for characteristics of nonpathogenic bacteria and a "P" for pathogenic characteristics in the appropriate blanks.

_____a. Cause many diseases, such as syphilis, gonorrhea, tuberculosis, typhoid and paratyphoid fevers, and whooping cough

_____b. Assist in decomposition of organic matter

_____c. Aid in production of some foods and chemicals, such as cheeses, sauerkraut, cultured milk products, and lactic acid

_____d. Essential for life

11. Sketch pictures of microorganisms from prepared cultures.

(NOTE: If activity 11 has not been accomplished prior to the test, ask the instructor when it should be completed.)

MICROBIOLOGY
UNIT I

ANSWERS TO TEST

1. a. 10
   b. 5
   c. 1
   d. 3
   e. 8
   f. 2
   g. 7
   h. 6
   i. 4
   j. 9
   k. 12
   l. 13
   m. 11

2. a. Metabolism
   b. Growth
   c. Reproduction
   d. Irritability
   e. Motion
   f. Protection

3. c, d, e, f, g

4. a. 5
   b. 2
   c. 4
   d. 1
   e. 3
   f. 6

5. a, c, e

6. a. Y
   b. M
   c. M
   d. Y

7. a. Rocky Mountain spotted fever
   b. Typhus
   c. Q fever

8. a, b, d, e, g, i, j, l, n, o, p

9. a. Roundworm
   b. Pinworm
   c. Hookworm
   d. Trichinella
   e. Flatworm

10. a. P
    b. N
    c. N
    d. N

11. Evaluated to satisfaction of instructor

BASIC CONCEPTS OF PHYSICAL SCIENCES
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to classify the three states of matter and distinguish between properties of acids and bases. The student should also be able to classify the pH of solutions. This knowledge will be evidenced through completion of the assignment sheet and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with basic concepts of physical sciences to their correct definitions.
2. Classify states of matter.
3. State rules of nature governing the activities of solutions.
4. Classify elements and mixtures.
5. Match compounds to their correct formulae.
6. Distinguish between physical and chemical changes.
7. Name forms of energy.
8. Distinguish between properties of acids and bases.
9. Select from a list common properties of acids and bases.
10. Select from a list functions of mineral salts.
11. Classify the pH of solutions.

BASIC CONCEPTS OF PHYSICAL SCIENCES
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and assignment sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Provide materials to complete assignment sheet.

   G. Emphasize career opportunities such as pharmacy, chemistry, and medical research.

   H. Have resource people visit HOSA to give information about career fields.

      Examples: Pharmacists, biochemists, research scientists

   I. Promote learning of related information through playing games.

      Examples: Bingo, concentration

   J. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Forms of Energy

      2. TM 2--pH Scale

   D. Assignment Sheet #1--Classify the pH of Solutions

   E. Test

   F. Answers to test

III. Unit references:

A. Luros, Gretchen and Towne, Jack C. *Essentials of Chemistry.* Philadelphia, Pennsylvania: J.B. Lippincott Company, 1966.

B. Miller, Benjamin F. and Keane, Claire Brackman. *Encyclopedia and Dictionary of Medicine and Nursing.* Philadelphia, Pennsylvania: 1972.

C. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater Oklahoma: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

D. Thomas, Virginia E. *Life Sciences for Health Technologies.* Los Angeles, California: Technicourse Inc., 1970.

BASIC CONCEPTS OF PHYSICAL SCIENCES
UNIT II

INFORMATION SHEET

I. Terms and definitions

   A. Matter--Physical material having form and weight; anything that occupies space and has weight

   B. Plasma--Liquid part of the blood

   C. Solution--Liquid containing dissolved solids called *solutes*

   D. Element--Simple, pure substance which cannot be decomposed by ordinary chemical reactions

   E. Compound--Two or more elements united in a fixed ratio

   F. Mixture--Two or more elements or compounds which are not chemically combined

   G. Chemical change--Change which affects the composition of matter

   H. Physical change--Change which does not affect the composition of matter

   I. Energy--Force which produces change or results from change; the ability or power to do work

   J. Acid--Substance that yields hydrogen ions in solution

   K. Base--Substance that yields hydroxyl ions in solution

   L. pH--Hydrogen ion concentration of a solution; degree to which a solution is acidic or basic (Transparency 2)

   M. Mineral salts--Compounds formed from the reaction of an acid with a base

   N. Electrolyte--Any compound that separates into charged particles, called *ions* which are capable of conducting an electrical current when dissolved in water

   O. Chemistry--Science which deals with the composition of substances and the changes they undergo

   P. Physics--Science which deals with matter, energy, and their interactions

   Q. Distribution--Position, arrangement, or frequency of occurrence

   R. Concentration--Relative content or strength of an ingredient

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INFORMATION SHEET

S. Pressure--Stress, strain, or tension due to compression, expansion, pull, or thrust

T. Calorie--Unit of measurement of heat

(NOTE: A gram calorie or small calorie is the amount of heat required to raise the temperature of one gram of water one degree Celsius. A kilogram calorie or large calorie is the amount of heat required to raise the temperature of one kilogram of water one degree Celsius.)

U. Hydrostatic pressure--Pressure which a liquid exerts as a result of its own weight

V. Acidosis--Condition resulting from accumulation of acid or depletion of the alkaline reserve in the blood and body tissues

W. Alkalosis--Condition resulting from accumulation of base or depletion of acid reserve in the blood and body tissues

X. Ion--Atom or group of atoms carrying an electrical charge

II. States of matter

A. Solid--Has a definite shape, volume, and weight

Examples: Bones, tissues

B. Liquid--Has a definite volume and weight but assumes the shape of the container in which it is placed

Examples: Plasma, tissue fluid

C. Gas--Has a definite weight but indefinite shape and volume

Example: Oxygen and carbon dioxide in the lungs

III. Rules of nature governing the activities of solutions

A. Solutions always tend toward a state of equal concentration

B. Solutions of higher concentration tend to flow toward solutions of lower concentration

C. Liquids, including solutions, always flow toward a condition of the least possible hydrostatic pressure

IV. Elements and mixtures

A. Elements

1. Carbon (C)

2. Hydrogen (H)

INFORMATION SHEET

3. Oxygen (O)
4. Nitrogen (N)
5. Potassium (K)
6. Phosphorus (P)
7. Sodium (Na)
8. Chlorine (Cl)
9. Iron (Fe)
10. Iodine (I)

B. Mixtures

1. Blood
2. Urine
3. Milk
4. Salt water
5. Calamine lotion
6. Air
7. Granite
8. Mortar

V. Compounds and their formulae

A. $C_6H_{12}O_6$--Glucose

(NOTE: This is a simple sugar.)

B. NaCl--Sodium chloride

(NOTE: This is table salt.)

C. H_2O--Water

D. CO_2--Carbon dioxide

E. Fe_2O_3--Iron oxide

F. NaOH--Sodium hydroxide

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INFORMATION SHEET

G. HCl--Hydrochloric acid

(NOTE: This is present in gastric juices.)

H. ZnO--Zinc oxide

(NOTE: This is used in ointments.)

I. KCl--Potassium chloride

J. CH_3OH--Methyl or wood alcohol

VI. Physical and chemical changes

A. Chemical

1. Produce new substance

2. Are irreversible or reversible only with difficulty

Examples: Iron rusting, milk souring, wood burning, food being digested

B. Physical

1. Produce no new substance

2. Are easily reversible

Examples: Iron heating, water freezing to ice or heated to steam, food being chewed, finger being cut

VII. Forms of energy (Transparency 1)

A. Heat

B. Mechanical

C. Radiant

D. Electrical

E. Chemical

VIII. Properties of acids and bases

A. Acids

1. Sour taste

2. Pungent odor

3. Excessive concentration in body fluids causes acidosis

INFORMATION SHEET

B. Bases

1. Bitter taste
2. Soapy or slippery feeling
3. Excessive concentration in body fluids causes alkalosis

IX. Common properties of acids and bases

A. React with each other to produce salts and water

B. Essential to the maintenance of normal acid-base balance in the body

C. Cause certain dyes to undergo color changes

X. Functions of mineral salts

(NOTE: Mineral salts are found in bones and teeth primarily as calcium and phosphorus. The chemical formula for calcium phosphate is $Ca_3(PO_4)_2$.

A. Maintenance of acid-base balance

B. Maintenance of fluid balance

C. Production of electrolyte salts that separate into ionized particles in body fluids

Examples of electrolytes:

Positive charges	Negative charges
Sodium Na^+	Chloride Cl^-
Potassium K^+	Bicarbonate HCO_3^-
Calcium Ca^{++}	Sulfate SO_4^-
Magnesium Mg^{++}	Phosphate PO_4^-

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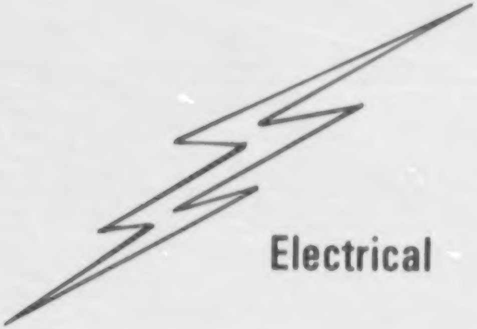
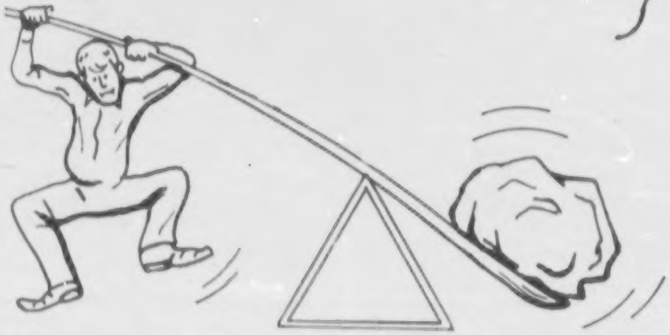
Forms of Energy

Heat

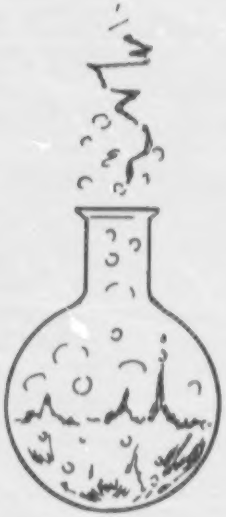


Electrical

Radiant



Mechanical



Chemical

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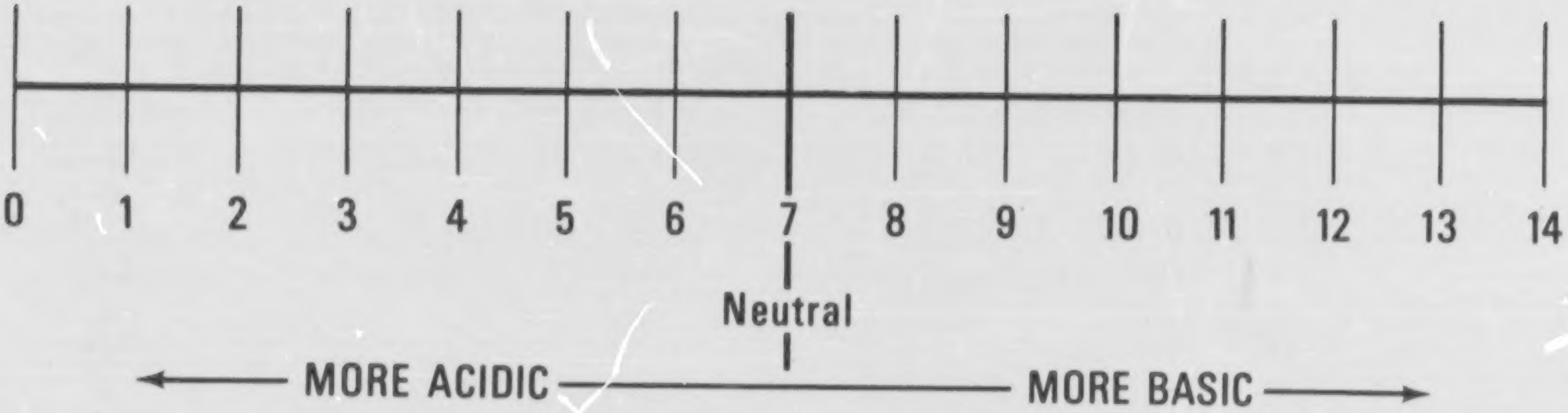
pH Scale



BASIC CONCEPTS OF PHYSICAL SCIENCES
UNIT II

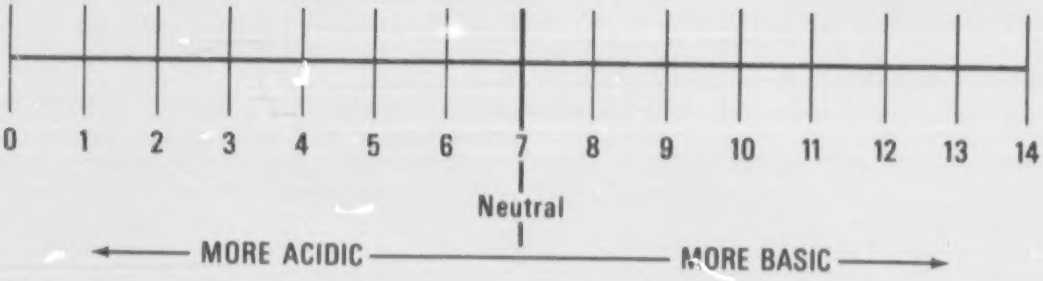
ASSIGNMENT SHEET #1--CLASSIFY THE pH OF SOLUTIONS

Knowledge of acidic and basic substances is very important in the health field. To remain healthy, people must maintain a good balance of acids and bases in the body.

Using the litmus paper and instructions given by the instructor, test different solutions to find their pH. Suggestions for solutions to use include tomato juice, vinegar, household cleansers, shampoo, baking soda, blood, and urine.

Classify the pH of solutions provided by the instructor on the scale below.

pH Scale



BASIC CONCEPTS OF PHYSICAL SCIENCES
UNIT II

TEST

NAME ______________ ________________________ SCORE ________________

1. Match terms associated with basic concepts of physical sciences to their correct definitions by placing the correct numbers in the blanks provided.

_____a. Liquid part of the blood

_____b. Substance that yields hydrogen ions in solution

_____c. Two or more elements or compounds which are not chemically combined

_____d. Compounds formed from the reaction of an acid with a base

_____e. Change which does not affect the composition of matter

_____f. Physical material having form and weight; anything that occupies space and has weight

_____g. Hydrogen ion concentration of a solution; degree to which a solution is acidic or basic

_____h. Simple, pure substance which cannot be decomposed by ordinary chemical reactions

_____i. Atom or group of atoms carrying an electrical charge

_____j. Pressure which a liquid exerts as a result of its own weight

_____k. Unit of measurement of heat

_____l. Condition resulting from accumulation of base or depletion of acid reserve in the blood and body tissues

1. Acid
2. pH
3. Mixture
4. Matter
5. Hydrostatic pressure
6. Alkalosis
7. Plasma
8. Calorie
9. Physical change
10. Element
11. Mineral salts
12. Ion

______m. Relative content or strength of an ingredient

______n. Science which deals with the composition of substances and the changes they undergo

______o. Position, arrangement, or frequency of occurrence

______p. Science which deals with matter, energy, and their interactions

______q. Stress, strain, or tension due to compression, expansion, pull, or thrust

______r. Condition resulting from accumulation of acid or depletion of the alkaline reserve in the blood and body tissues

______s. Liquid containing dissolved solids called *solutes*

______t. Two or more elements united in a fixed ratio

______u. Change which affects the composition of matter

______v. Force which produces change or results from change; the ability or power to do work

______w. Substance that yields hydroxyl ions in solution

______x. Any compound that separates into charged particles, called ions, which are capable of conducting an electrical current when dissolved in water

13. Base
14. Energy
15. Electrolyte
16. Acidosis
17. Chemical change
18. Distribution
19. Compound
20. Concentration
21. Chemistry
22. Pressure
23. Physics
24. Solution

2. Classify states of matter by placing an "S" for solid, an "L" for liquid, and a "G" for gas in the appropriate blanks.

______a. Has a definite weight but indefinite shape and volume

______b. Has a definite shape, volume, and weight

______c. Has a definite volume and weight, but assumes the shape of the container in which it is placed

3. State rules of nature governing the activities of solutions.

a. ______________________________

b. ______________________________

c. ______________________________

4. Classify the elements and mixtures listed below by placing an "E" for the elements and an "M" for the mixtures in the appropriate blanks.

_____a. Air

_____b. Iron

_____c. Carbon

_____d. Blood

_____e. Phosphorus

_____f. Oxygen

_____g. Urine

_____h. Mortar

_____i. Hydrogen

_____j. Granite

_____k. Nitrogen

_____l. Potassium

_____m. Sodium

_____n. Chlorine

_____o. Milk

_____p. Iodine

_____q. Salt water

_____r. Calamine lotion

5. Match compounds to their correct formulae by placing the correct numbers in the appropriate blanks.

_____a. Glucose

_____b. Sodium chloride

_____c. Water

_____d. Carbon dioxide

_____e. Iron oxide

_____f. Sodium hydroxide

_____g. Hydrochloric acid

_____h. Zinc oxide

_____i. Potassium chloride

_____j. Methyl or wood alcohol

1. KCl
2. H_2O
3. Fe_2O_3
4. ZnO
5. $NaCl$
6. CH_3OH
7. $C_6H_{12}O_6$
8. $NaOH$
9. CO_2
10. HCl

6. Distinguish between physical and chemical changes by placing a "P" for physical changes and a "C" for chemical changes in the appropriate blanks.

_____a. Produce no new substance

_____b. Produce new substance

_____c. Are irreversible or reversible only with difficulty

_____d. Are easily reversible

7. Name five forms of energy.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

8. Distinguish between properties of acids and bases by placing an "A" for acids and a "B" for bases in the appropriate blanks.

_____a. Soapy or slippery feeling

_____b. Pungent odor

_____c. Excessive concentration in body fluids causes alkalosis

_____d. Sour taste

_____e. Bitter taste

_____f. Excessive concentration in body fluids causes acidosis

9. Select from the list below common properties of acids and bases by placing an "X" in the appropriate blanks.

_____a. Essential for the formation of teeth and bones

_____b. Cause certain dyes to undergo color changes

_____c. Essential to the process of digestion

_____d. Essential to the maintenance of normal acid-base balance in the body

_____e. React with each other to produce salts and water

10. Select from the list below functions of mineral salts by placing an "X" in the appropriate blanks.

_____a. Maintenance of fluid balance

_____b. Production of neutral ionized particles in body fluids

_____c. Maintenance of acid-base balance

11. Classify the pH of solutions.

(NOTE: If activity 11 has not been completed prior to the test, ask the instructor when it should be accomplished.)

BASIC CONCEPTS OF PHYSICAL SCIENCES
UNIT II

ANSWERS TO THE TEST

1. a. 7
   b. 1
   c. 3
   d. 11
   e. 9
   f. 4
   g. 2
   h. 10
   i. 12
   j. 5
   k. 8
   l. 6
   m. 20
   n. 21
   o. 18
   p. 23
   q. 22
   r. 16
   s. 24
   t. 19
   u. 17
   v. 14
   w. 13
   x. 15

2. a. G
   b. S
   c. L

3. a. Solutions always tend toward a state of equal concentration
   b. Solutions of higher concentration tend to flow toward solutions of lower concentration
   c. Liquids, including solutions, always flow toward a condition of the least possible hydrostatic pressure

4. a. M
   b. E
   c. E
   d. M
   e. E
   f. E
   g. M
   h. M
   i. E
   j. M
   k. E
   l E
   m. E
   n. E
   o. M
   p. E
   q. M
   r. M

5. a. 7
   b. 5
   c. 2
   d. 9
   e. 3
   f. 8
   g. 10
   h. 4
   i. 1
   j. 6

6. a. P
   b. C
   c. C
   d. P
7. a. Heat
   b. Mechanical
   c. Radiant
   d. Electrical
   e. Chemical
8. a. B
   b. A
   c. B
   d. A
   e. B
   f. A
9. b, d, e
10. a, c
11. Evaluated to the satisfaction of the instructor

ENDOCRINE SYSTEM
UNIT III

UNIT OBJECTIVE

After completion of this unit, the student should be able to complete a chart on endocrine glands, their hormones, and functions. The student should also be able to perform urine tests for sugar and acetone. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with the endocrine system to their correct definitions.
2. Select from a list fundamental facts about endocrine glands.
3. Identify major endocrine glands on a diagram.
4. Select from a list general characteristics of hormones.
5. Complete a chart on major endocrine glands, their hormones, and functions.
6. Match disorders of major endocrine glands to their correct definitions.
7. Name ways of maintaining the endocrine system.
8. Name major factors which contribute to the development of diabetes mellitus.
9. Match symptoms of diabetes mellitus to their correct definitions.
10. Demonstrate the ability to:
    a. Perform Clinitest for sugar in urine.
    b. Perform Tes-tape test for sugar in urine.
    c. Perform urine test for acetone.

ENDOCRINE SYSTEM
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information and job sheets.

   F. Provide time and materials to complete job sheets.

   G. Collect pictures demonstrating disorders of the endocrine system.

   (NOTE: Medical surgical texts provide many pictures.)

   H. Elaborate on secreted hormones, if needed.

   I. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency master: TM 1--Major Endocrine Glands

   D. Job sheets

      1. Job Sheet #1--Perform Clinitest for Sugar in Urine

      2. Job Sheet #2--Perform Tes-tape Test for Sugar in Urine

      3. Job Sheet #3--Perform Urine Test for Acetone

   E. Test

   F. Answers to test

III. Unit references:

A. Culver, Vivan M. *Modern Bedside Nursing*. Philadelphia, Pennsylvania: W.B. Saunders Company, 1969.

B. Memmler, Ruth L., and Rada, Ruth B. *The Human Body in Health and Disease*. Philadelphia, Pennsylvania: J.B. Lippincott Company, 1972.

C. Rogers, Helen. *Nursing I: A Course of Study*. Stillwater: Oklahoma State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1974.

D. Thomas, Virginia E. *Life Sciences for Health Technologies*. Los Angeles, California: Technicourse, Inc., 1970.

E. Tether, J. Edward et al. *Modern Health*. New York: Holt, Rinehart, and Winston, Publishers, 1976.

F. Von Gremp, Zella, and Broadwell, Lucile. *Practical Nursing Study Guide and Review*. Philadelphia, Pennsylvania: J.B. Lippincott Company, 1965.

IV. Additional materials:

A. Films

1. "The Endocrine Glands." American Medical Association, 535 N. Dearborn St., Chicago, Illinois 60610.

2. "Diabetes and You, Too." Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.

B. Filmstrips

1. "The Endocrine System." Robert J. Brady Company, Prentice-Hall Co., Bowie, Maryland 20715.

2. "Testing Your Urine for Sugar and Ketones." Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.

ENDOCRINE SYSTEM
UNIT III

INFORMATION SHEET

I. Terms and definitions

   A. Endocrinology--Study of the endocrine system

   B. Hormone--Internal secretion of a gland or an organ which regulates a body function

   C. Steroid--Organic compound derived from fats

   D. Malfunction--Failure to operate in normal or usual manner

   E. Hypersecretion--Excessive secretion

   F. Hyposecretion--Inadequate secretion

   G. Diabetes insipidus--Metabolic disorder characterized by intense thirst and excretion of large amounts of urine

   H. Diabetes mellitus--Disorder of carbohydrate metabolism characterized by hyperglycemia and glycosuria

   (NOTE: Diabetes mellitus is usually caused by malfunction of pancreas that results in a limited or no secretion of insulin. It may also be a result of malfunctions of other endocrine glands.)

   I. Endocrine glands--Ductless glands that secrete directly into the blood

   J. Exocrine glands--Glands whose secretions reach the epithelial surface either directly or through a duct

   K. Tetany--Disturbed calcium metabolism resulting in intermittent muscle spasm of the extremities

   (NOTE: Tetany must not be confused with tetanus, which is an acute infectious disease-producing toxin that causes persistent spasm of the voluntary muscles.)

II. Fundamental facts about endocrine glands

   A. Located in widely separated parts of the body

   B. Closely related to the nervous system in regulatory action

   (NOTE: The regulatory actions of the nervous and the endocrine systems differ in the speed and duration of response. Nerve action usually occurs in a fraction of a second and lasts only as long as the stimulation is present. Endocrine action is slower and produces a more prolonged stimulation and regulation.)

C. Well-supplied with blood and often present a bleeding problem in surgery

D. Interrelated actions; hormones from one gland act upon another gland

E. Composed of epithelial and connective tissue

III. Endocrine glands (Transparency 1)

A. Pituitary

B. Parathyroids

C. Thyroid

D. Thymus

(NOTE: The thymus produces a hormone which stimulates production of lymphocytes by the lymph glands.)

E. Adrenals

F. Pancreas

G. Ovaries

(NOTE: During pregnancy the female produces progesterone and estrogen from the placenta, an organ that provides nutrition, respiration, and excretion to fetus.)

H. Testes

IV. General characteristics of hormones

A. Concentration of one hormone may influence concentration of other hormones

B. Hormones have a profound effect upon growth, development, and personality of an individual

C. Most hormones are steroids or proteins and have specific functions

V. Major endocrine glands, their hormones, and functions

	Gland	Hormone	Function
A.	Pituitary	TSH (thyrotropic hormone), ACTH (adrenocorticotropic hormone), FSH (follicle stimulating hormone), LH (luteinizing hormone), ADH (antidiuretic hormone), oxytocin, prolactin, and somatotropic hormone	Controls other glands; stimulates growth
B.	Thyroid	Thyroxin	Controls rate of metabolism

INFORMATION SHEET

	Gland	Hormone	Function
C.	Parathyroid	Parathyroid hormone	Regulates calcium and phosphorous metabolism
D.	Pancreas	Insulin from islands of Langerhans	Essential for utilization of glucose
E.	Ovaries	Estrogen and progesterone	Development and maintenance of female reproductive organs
F.	Testes	Testosterone	Development and maintenance of male reproductive organs
G.	Adrenal medulla	Adrenalin	Prepares body for fight or flight
H.	Adrenal cortex	Corticoids	Aids body in coping with stress or infection

VI. Disorders of major endocrine glands

A. Myxedema--Severe grade of hypothyroidism occurring in adult life

(NOTE: Symptoms include drop in temperature and pulse; weight gain; skin thickening; hair thinning and falling out; speech slowing; tongue, hands and feet increasing in size; and possible deafness.)

B. Grave's disease or exophthalmic goiter--Elevated thyroid level

(NOTE: Symptoms include extreme nervousness, profuse perspiration, flushed skin, tremor of hands, bulging eyes, increased appetite but loss of weight, and enlargement of the thyroid gland.)

C. Addison's disease--Insufficient amount of hormones from the adrenal gland on the kidney

(NOTE: Symptoms include muscular weakness, loss of appetite, fatigue, dark pigmentation of the skin, hypotension, low blood sugar, low basal metabolic rate, low blood sodium, and high serum potassium.)

D. Cretinism--Disorder in infants caused from malfunction of thyroid gland in which it produces only slightly or not at all

(NOTE: Symptoms include swelling of face, enlargement of lips, thickening and protrusion of tongue. Body becomes stunted and the abdomen enlarges. Arms and legs do not grow to normal length and become short and thick. Infants can become mentally defective.)

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INFORMATION SHEET

VII. Maintaining the endocrine system

- A. Adequate intake of iodine for manufacture of thyroxin

  (NOTE: Iodine is available naturally in some foods, water, or iodized salt.)

- B. Well-balanced diet
- C. Weight control
- D. Regular physical examination
- E. Observation for symptoms of endocrine malfunction

VIII. Major factors which contribute to the development of diabetes mellitus

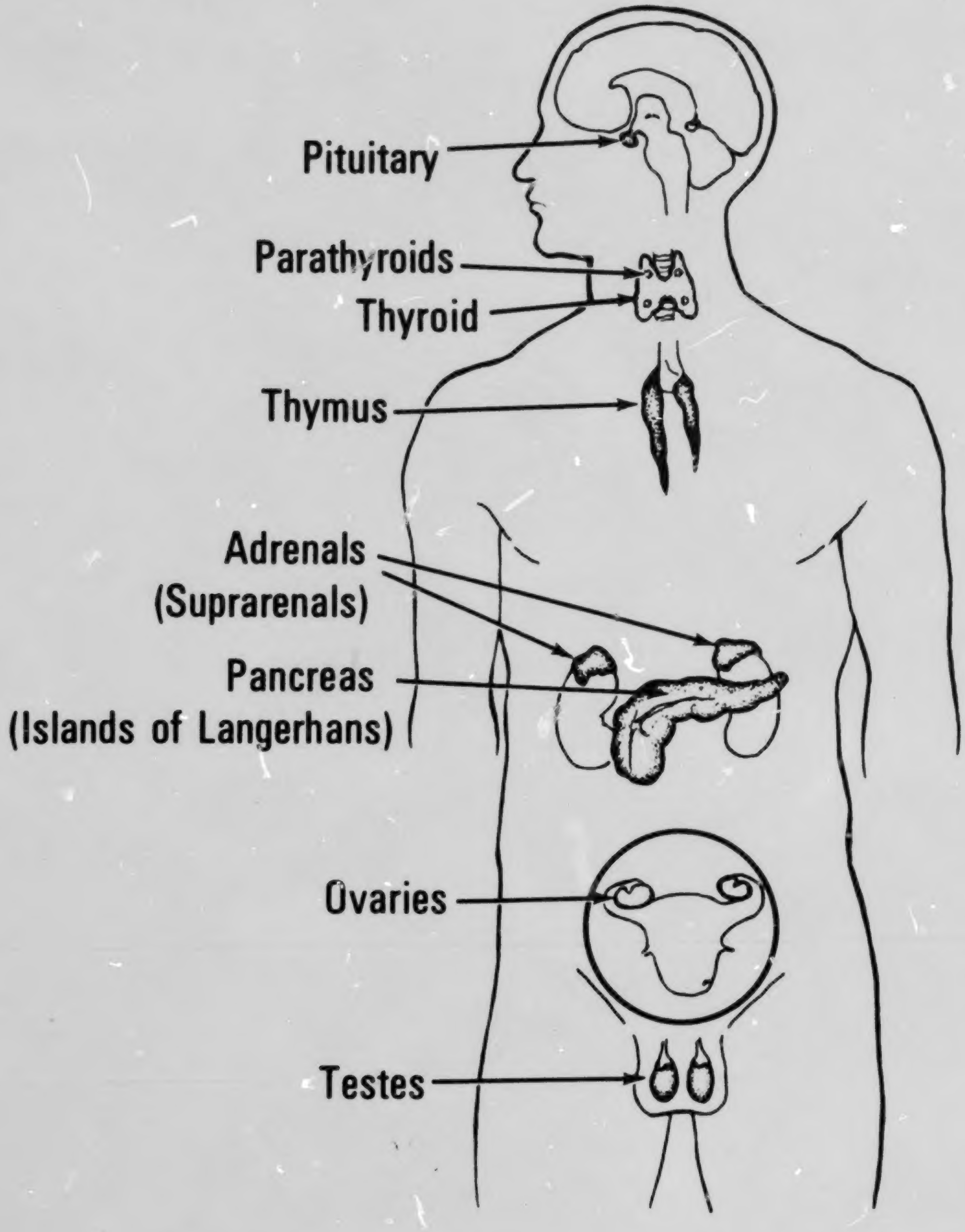
- A. Inability to produce insulin due to injury, disease, or tumor
- B. Insulin shortage due to overeating
- C. Aging
- D. Familial tendency

IX. Symptoms of diabetes mellitus

(NOTE: There are other disorders affecting the endocrine system, but diabetes is very prevalent today and common to all ages of the population. Health facilities are concerned with care of these patients.)

- A. Polyuria--Excessive amount of urine excreted over a period of time
- B. Polydipsia--Excessive thirst
- C. Polyphagia--Excessive craving for food
- D. Glycosuria--Presence of abnormal amount of glucose in urine
- E. Hyperglycemia--Abnormal amount of sugar in blood

Major Endocrine Glands



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ENDOCRINE SYSTEM
UNIT III

JOB SHEET #1--PERFORM CLINITEST FOR SUGAR IN URINE

I. Equipment

A. Clinitest tablets

B. Test tube

C. Eyedropper

D. Color chart

(NOTE: Pamphlet is usually supplied with tablets.)

E. Urine specimen

II. Procedure

A. Wash hands

B. Identify patient and explain procedure

C. Provide privacy

D. Obtain urine specimen

(NOTE: The Clinitest is done four times a day, before meals and before bedtime unless physician's orders differ. If possible, have patient void, discard, and then get second voiding for testing.)

E. Take specimen to utility room or patient's bathroom

F. Assemble test tube, Clinitest tablet, and eyedropper on table surface near running water

G. Hold test tube in one hand between thumb and forefinger about 30 mm (1 1/4 in) from the top of the tube; with the other hand, draw up five drops of urine with the eyedropper

(CAUTION: EXTREME ACCURACY IS NECESSARY. DROP THE URINE INTO THE CENTER OF THE TEST TUBE.)

H. Rinse eyedropper in running water

I. Draw ten drops of water into eyedropper and add to urine in test tube

J. Rotate test tube gently

K. Remove one Clinitest tablet from bottle and drop it into the test tube

(NOTE: Do not use tablets which are moist or have changed color.)

JOB SHEET #1

L. Continue to hold test tube at top

(CAUTION: THE DISSOLVING TABLET CAUSES A BOILING REACTION, AND THE BOTTOM OF THE TEST TUBE WILL BECOME HOT.)

M. Shake tube gently after fifteen seconds or after boiling stops; compare with Clinitest color chart

N. Clean work area

O. Record readings on patient's chart

(NOTE: Reactions are negative or positive. If fluid is blue, there is no sugar present and the test is considered negative. If fluid changes in color from dark green to orange, the test is positive. Check the color change in test tube with the block on the color chart indicating the degree of sugar content: trace, 1+, 2+, 3+, or 4+.)

P. Report findings immediately to person giving medications

(NOTE: The dosage of insulin given to a diabetic patient will be based on the amount of sugar in the urine.)

ENDOCRINE SYSTEM
UNIT III

JOB SHEET #2--PERFORM TES-TAPE TEST FOR SUGAR IN URINE

I. Equipment

A. 3.81 cm (1 1/2 in) Tes-tape

B. Urine specimen

C. Color chart on Tes-tape dispenser

II. Procedure

A. Wash hands

B. Identify patient and explain procedure

C. Provide privacy

D. Obtain urine specimen; use second voided specimen, if possible

E. Take specimen to utility room or to patient's bathroom

F. Withdraw 3.81 cm (1 1/2 in) of Tes-tape from dispenser

(NOTE: Do not use tape if it has turned brown.)

G. Dip distal end of tape into urine and remove immediately after it has been uniformly moistened

H. Wait one minute

(NOTE: Use second hand watch to time test.)

I. Compare tape with color chart on exterior of dispenser

J. Clean work area

K. Record findings

(NOTE: Usual color designations are yellow, indicating zero percent, and varying shades of green, ranging from light to dark indicating 1+, 2+, 3+, or 4+.)

L. Report findings immediately

(NOTE: Patients taking certain medication may need to have their urine tested only with the Tes-tape method because others will be inaccurate.)

ENDOCRINE SYSTEM
UNIT III

JOB SHEET #3–PERFORM URINE TEST FOR ACETONE

I. Equipment

  A. Acetest tablet

  B. Paper towel

  C. Eyedropper

  D. Color chart

II. Procedure

  A. Wash hands

  B. Identify patient and explain procedure

  C. Provide privacy

  D. Obtain urine specimen

  E. Take specimen to utility room or patient's bathroom

  F. Place clean paper towel on flat, dry surface

  G. Place one tablet on paper without hands touching it

  H. Draw urine up in eyedropper

  I. Drop one drop on tablet

  J. Wait exactly thirty seconds

  K. Compare color of the tablet with color chart on bottle

  (NOTE: Reactions are negative or positive. If color is unchanged or tablet becomes cream colored, the test is considered negative. If tablet turns from lavender to a deep purple, the test is considered positive. Color designations are as follows: lavender indicates a trace amount of acetone; medium purple indicates a moderate amount of acetone; dark purple indicates a large amount of acetone.)

  L. Report finding

ENDOCRINE SYSTEM
UNIT III

TEST

NAME ______________________________ SCORE ______________

1. Match the terms associated with the endocrine system to their correct definitions by placing the appropriate numbers in the blanks provided.

_____a. Excessive secretion

_____b. Metabolic disorder characterized by intense thirst and excretion of large amounts of urine

_____c. Organic compound derived from fats

_____d. Disturbed calcium metabolism resulting in intermittent muscle spasm of the extremities

_____e. Internal secretion of a gland or an organ which regulates a body function

_____f. Disorder of carbohydrate metabolism characterized by hyperglycemia and glycosuria

_____g. Inadequate secretion

_____h. Failure to operate in normal or usual manner

_____i. Ductless glands that secrete directly into the blood

_____j. Study of the endocrine system

_____k. Glands whose secretions reach the epithelial surface either directly or through a duct

1. Endocrinology
2. Hormone
3. Steroid
4. Malfunction
5. Hypersecretion
6. Hyposecretion
7. Diabetes insipidus
8. Diabetes mellitus
9. Endocrine glands
10. Exocrine glands
11. Tetany

2. Select from the list below fundamental facts about endocrine glands by placing an "X" in the appropriate blanks.

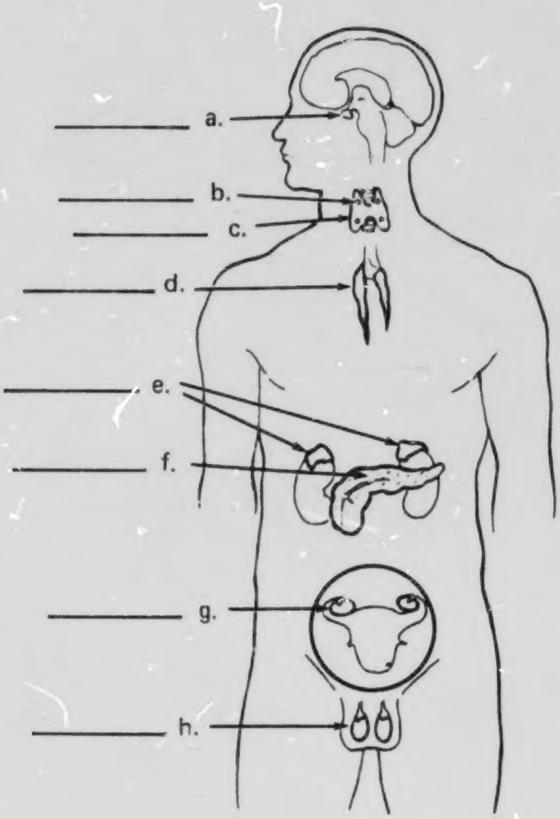
_____a. Well-supplied with blood and often present a bleeding problem in surgery

_____b. Located centrally in body

_____c. Composed of epithelial and muscular tissue _____d. Interrelated actions; hormones from one gland act upon another gland

_____e. Closely related to the muscular system in regulatory action

3. Identify endocrine glands on the diagram below by writing their names in the blanks provided.



1. Thymus
2. Pancreas
3. Testes
4. Ovaries
5. Thyroid
6. Parathyroids
7. Pituitary
8. Adrenals

4. Select from the list below general characteristics of hormones by placing an "X" in the appropriate blanks.

_____a. Most hormones are steroids or proteins and have specific functions

_____b. Hormones have little effect upon growth, development, or personality of an individual

_____c. Each hormone has several functions

5. Complete the chart below by placing major endocrine glands, their hormones and functions in the appropriate blanks.

Gland	Hormone	Function
Testes	a. ________________	Development and maintenance of male reproductive organs
b. ________________	Thyroxin	Controls rate of metabolism
Pancreas	insulin from islands of Langerhans	c. ____________ ____________
d. ________________	Adrenalin	Prepares body for fight or flight
Pituitary	TSH (thyrotropic hormone), ACTH (adrenocorticotropic hormone), FSH (follicle stimulating hormone), LH (luteinizing hormone), ADH (antidiuretic hormone), oxytocin, prolactin, and somatotropic hormone	e. ____________ ____________
f. ________________	Estrogen and progesterone	Development and maintenance of female reproductive organs
Parathyroid	Parathyroid hormone	g. ____________ ____________ ____________
Adrenal cortex	h. ________________	Aids body in coping with stress or infection

6. Match disorders of the major endocrine glands to their correct definitions by placing the correct numbers in the appropriate blanks.

_____a. Severe grade of hypothyroidism occurring in adult life

_____b. Elevated thyroid level

_____c. Insufficient amount of hormones from the adrenal gland on the kidney

_____d. Disorder in infants caused from malfunction of thyroid gland in which it produces only slightly or not at all

1. Addison's disease
2. Myxedema
3. Cretinism
4. Grave's disease or exophthalmic goiter

7. Name three ways to maintain the endocrine system.

a. ______________________________

b. ______________________________

c. ______________________________

8. Name major factors which contribute to the development of diabetes mellitus.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

9. Match symptoms of diabetes mellitus to their correct definitions by placing the correct numbers in the appropriate blanks.

_____a. Excessive thirst

_____b. Abnormal amount of sugar in blood

_____c. Excessive craving for food

_____d. Excessive amount of urine excreted over a period of time

_____e. Presence of abnormal amount of glucose in urine

1. Polyuria
2. Polydipsia
3. Polyphagia
4. Glycosuria
5. Hyperglycemia

10. Demonstrate the ability to:

a. Perform Clinitest for sugar in urine.

b. Perform Tes-tape test for sugar in urine.

c. Perform urine test for acetone.

(NOTE: If the above activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

ENDOCRINE SYSTEM
UNIT III

ANSWERS TO TEST

1. a. 5
   b. 7
   c. 3
   d. 11
   e. 2
   f. 8
   g. 6
   h. 4
   i. 9
   j. 1
   k. 10

2. a, d

3. a. Pituitary
   b. Parathyroids
   c. Thyroid
   d. Thymus
   e. Adrenals
   f. Pancreas
   g. Ovaries
   h. Testes

4. a

5. a. Testosterone
   b. Thyroid
   c. Essential for utilization of glucose
   d. Adrenal medulla
   e. Controls other glands; stimulates growth
   f. Ovaries
   g. Regulates calcium and phosphorous metabolism
   h. Corticoids

6. a. 2
   b. 4
   c. 1
   d. 3

7. Any three of the following:
    a. Adequate intake of iodine for manufacture of thyroxin
    b. Well-balanced diet
    c. Weight control
    d. Regular physical examination
    e. Observation for symptoms of endocrine malfunction

8. a. Inability to produce insulin due to injury, disease, or tumor
    b. Insulin shortage due to overeating
    c. Aging
    d. Familial tendency

9. a. 2
    b. 5
    c. 3
    d. 1
    e. 4

10. Performance skills evaluated to the satisfaction of the instructor

GENITOURINARY SYSTEM
UNIT IV

UNIT OBJECTIVE

After completion of this unit, the student should be able to name functions of the male and female reproductive and urinary systems. The student should also be able to demonstrate the ability to collect various types of urine specimens, and give catheter care. This knowledge will be evidenced through completion of the assignment sheet, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with the reproductive system to their correct definitions.
2. Name functions of the male and female reproductive systems.
3. Identify on a diagram parts of the male reproductive system and adjacent structures.
4. Identify on a diagram parts of the female reproductive system and adjacent structures.
5. Match male and female external and internal reproductive organs to their functions.
6. Match the stages of the 28-day menstrual cycle to their descriptions.
7. Select from a list characteristics of menopause.
8. Match terms associated with the urinary system to their correct definitions.
9. Identify major parts of the urinary system on a diagram.
10. Name the main functions of the urinary system.
11. Classify characteristics of the male and female urethra.
12. Distinguish between normal and abnormal components of urine.
13. Describe characteristics of normal urine.
14. Name ways to maintain a healthy urinary system.
15. Match terms associated with collecting urine specimens to their correct definitions.

16. Name characteristics to observe about urination.

17. Match terms associated with conditions relating to the urinary tract to their correct definitions.

18. Write an essay on the reproductive system.

19. Demonstrate ability to:

    a. Give and remove bedpan and/or urinal.

    b. Assist patient to the bathroom.

    c. Assist patient in using the commode.

    d. Collect a urine specimen.

    e. Obtain a clean catch or midstream urine specimen.

    f. Collect a twenty-four hour urine specimen.

    g. Give catheter care.

GENITOURINARY SYSTEM
UNIT IV

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

   A. Provide students with objective sheet.

   B. Provide students with information, assignment, and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Invite resource persons to visit class and/or HOSA activities.

   Example: Gynecologists, urologists

   G. Contact Ortho Company for birth control methods kit, breast exam model, and other related materials.

   H. Provide materials and time to complete job sheets.

   I. Give test.

II. Unit materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Male Reproductive System

      2. TM 2--Female Reproductive System: External Organs

      3. TM 3--Female Reproductive System: Internal Organs

      4. TM 4--Female Reproductive System: Uterus and Fallopian Tubes

      5. TM 5--The Breast

      6. TM 6--The Menstrual Cycle

      7. TM 7--The Urinary System

   D. Assignment Sheet #1--Write Essay on Reproductive System

E. Job sheets

1. Job Sheet #1--Give and Remove a Bedpan and/or Urinal
2. Job Sheet #2--Assist Patient to the Bathroom
3. Job Sheet #3--Assist Patient in Using the Commode
4. Job Sheet #4--Collect a Urine Specimen
5. Job Sheet #5--Obtain a Clean Catch or Midstream Urine Specimen
6. Job Sheet #6--Collect a Twenty-four Hour Specimen
7. Job Sheet #7--Give Catheter Care

F. Test

G. Answers to test

III. Unit references:

A. Culver, Vivian M. *Modern Bedside Nursing.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1969.

B. Memmler, Ruth L., and Rada, Ruth B. *The Human Body in Health and Disease.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1972.

C. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

D. Thompson, Ella M., and Rosdahl, Caroline B. *Textbook of Basic Nursing.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1973.

E. von Gremp, Zella and Broadwell, Lucille. *Practical Nursing Study Guide and Review.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1965.

IV. Films:

A. "As Boys Grow." Available from Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.

B. "Female Cycle."* Films Incorporated, 733 Greenbay Road, Wilmette, IL 60091.

C. "It's Wonderful Being a Girl." Oklahoma State Department of Health.

D. "Puberty in Boys."* Films Incorporated, 733 Greenbay Road, Wilmette, IL 60091.

(*NOTE: These films are also available only to Oklahoma teachers from Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, OK 74074.)

E. "The Story of Menstruation." Oklahoma State Department of Health.

F. "Especially for Boys." Oklahoma State Department of Health.

G. "The Human Body: Reproductive System." Oklahoma State Department of Health.

H. "Menstrual Education Aid: The Female Cycle." G. D. Searle and Company, Films, Inc., 1144 Wilmette Ave., Wilmette, IL 60091.

V. Filmstrips:

1. "The Obsolete Menopause." Upjohn Professional Film Library, Upjohn Company, 7000 Portage Road, Kalamazoo, MI 49007.
2. "The Urinary Tract Problem." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

GENITOURINARY SYSTEM
UNIT IV

INFORMATION SHEET

I. Terms and definitions

- A. Gynecology--Study of the diseases of the female reproductive system
- B. Semen--Thick, white secretion of the male reproductive glands
- C. Puberty--Period at which one becomes capable of reproduction
- D. Scrotum--External pouch containing the testes
- E. Spermatazoa--Male reproductive cell
- F. Ovum--Female reproductive cell
- G. Copulation--Sexual intercourse
- H. Viscid--Thick, sticky
- I. Pubic--Pertaining to the os pubis, the anterior bone of the pelvis
- J. Endometrium--Mucous membrane lining of the uterus
- K. Vulva--External female genitalia
- L. Perineum--Area between external genitalia and anus
- M. Broad ligament--Fold of peritoneum that supports the uterus
- N. Menarche--Beginning of menstruation
- O. Graafian follicle--Thin-walled cavity in the ovary enclosing a developing ovum
- P. Menopause--Normal condition that results in permanent cessation of menstrual activity

  (NOTE: Menopause usually occurs between the ages of forty-two and fifty-four.)
- Q. Spermatic cord--Cord suspending the testes; composed of veins, arteries, lymphatics, nerves, and vas deferens
- R. Glans penis--Head of the penis
- S. Prepuce--Fold of skin over the glans penis
- T. Circumcision--Surgical removal of the prepuce

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INFORMATION SHEET

U. Lactiferous ducts--Ducts which convey milk

V. Mammary glands--Glands of the breast which secrete milk

W. Menstruation--Periodic discharge of blood and tissues from the nonpregnant uterus

X. Viable--Capable of maintaining an independent existence

Y. Climacteric--Period that marks the cessation of the reproductive function in the female or diminishing testicular activity in the male

Z. Fertilization--Process by which the sperm unites with the ovum

AA. Reproduction--Process by which a living organism produces a new individual of the same kind

II. Functions of the male and female reproductive system

A. Perpetuation of the human species

B. Sexual gratification

C. Secretion of hormones

III. Male reproductive system and adjacent structures (Transparency 1)

A. Testis or testicle (two)

(NOTE: The plural is testes or testicles.)

B. Scrotum

C. Epididymis (two)

(NOTE: The plural is epididymides.)

D. Vas deferens

(NOTE: This is also called ductus deferens.)

E. Ejaculatory duct (two)

F. Urethra

G. Prostate gland

H. Seminal vesicles (two)

I. Bulbourethral glands (two)

J. Penis

INFORMATION SHEET

- K. Glans penis
- L. Prepuce
- M. Urinary bladder
- N. Rectum
- O. Pubic bone
- P. Kidney
- Q. Ureter

IV. Female reproductive system and adjacent structures

- A. External organs (Transparency 2)
  1. Mons pubis
  2. Clitoris
  3. Meatus of urethra
  4. Labia majora
  5. Labia minora
  6. Vaginal orifice
  7. Hymen
  8. Vestibule
  9. Perineum
  10. Anus
- B. Internal organs (Transparencies 3 and 4)
  1. Uterus
  2. Fallopian tube (two)
  3. Ovary (two)
  4. Pubic bone
  5. Cervix
  6. Endometrium

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INFORMATION SHEET

        7. Vagina
        8. Urinary bladder
        9. Urethra
        10. Meatus of urethra
        11. Rectum
        12. Labia minora
        13. Labia majora
        14. Vaginal orifice

    C. Breast (Transparency 5)
        1. Nipple
        2. Areola
        3. Lactiferous ducts
        4. Lobe of gland tissue
        5. Adipose tissue
        6. Pectoralis major
        7. Ribs

V. Functions of the male and female external and internal reproductive organs

    A. External male organs (Transparency 1)

	ORGAN	FUNCTION
1.	Scrotum	Protects testes; regulates and maintains favorable temperature for sperm production
2.	Testes	Produces sperm and testosterone
3.	Epididymis	Collects and stores sperm while maturing; conducts sperm to the outside
4.	Vas deferens	Transports sperm from the testes to the urethra
5.	Penis and urethra	Carries semen into vagina during copulation; carries urine from bladder

INFORMATION SHEET

B. Internal male organs (Transparency 1)

	ORGAN	FUNCTION
1.	Seminal vesicles	Contribute essential components to semen
2.	Prostate gland	Secretes alkaline fluids which enhance sperm mobility; contracts smooth muscles to aid in ejaculation
3.	Bulbourethral or Cowper's glands	Secrete viscid alkaline fluid which removes urine residue; secrete mucus for lubrication
4.	Vas deferens	Transports sperm from testes to urethra

C. External female organs (Transparencies 2 and 5)

	ORGAN	FUNCTION
1.	Mammary glands (breasts) (NOTE: Lactiferous ducts carry secretions from many lobules to one opening in nipple.)	Lactation (secretion of milk)
2.	Mons pubis	Protection of pubic bone
3.	Labia majora	Surround labia minora
4.	Labia minora	Enclose the vestibule
5.	Clitoris	Sexual excitation
6.	Urethral orifice	Regulation of urine flow
7.	Vaginal orifice	Opening of vagina
8.	Perineum	Pelvic floor

(NOTE: The term *perineum* is clinically used to mean the area between the vaginal orifice and the anus. The full use of the term, however, includes all structures between the mons pubis and the coccyx.)

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INFORMATION SHEET

D. Internal female organs (Transparencies 3 and 4)

	ORGAN	FUNCTION
1.	Vagina	Reception of the penis during copulation; passageway for infant during birth
2.	Uterus	Menstruation; during pregnancy, protection and nourishment of fertilized ovum until it becomes a viable infant
3.	Fallopian tubes (two)	Movement of ova from ovaries to uterus; where fertilization usually takes place
4.	Ovaries (two)	Production of hormones and ova; usually, only one ovum is produced once a month from alternate ovaries
5.	Bartholin's and Skene's glands	Secretion of lubricating fluid

VI. Menstrual cycle (Transparency 6)

(NOTE: The menstrual cycle is usually 28 days long.)

A. Days one through five--Usually menstruation occurs; one of the many ova enclosed in a Graafian follicle begins to mature

B. Days five through thirteen--During this period of ovum maturation, the Graafian follicle produces estrogen under the control of the pituitary gland, and the endometrium repairs and begins to thicken

C. By day fourteen--Ovulation occurs; Graafian follicle ruptures, and ovum is released into the abdominal cavity; fringed end of fallopian tube brings ovum into tube where it is propelled to uterus

(NOTE: if fertilization occurs, the ovum is penetrated by a sperm usually midway through the fallopian tube.)

D. Days fifteen through twenty--Corpus luteum forms, secreting progesterone; endometrium thickens

(NOTE: If fertilization does not occur, the corpus luteum and its secretions diminish, the blood supply to the endometrium decreases, and the uterine capillaries begin to bleed as the endometrium sloughs off.)

INFORMATION SHEET

E. Days twenty-one through twenty-eight--Hormone production decreases; endometrium shrinks

VII. Characteristics of menopause

A. Production of estrogen diminishes when ovaries become scar tissue as they atrophy

B. Atrophy of the uterus, fallopian tubes, vagina, and vulva occur because of lack of estrogen

(NOTE: Menopause may produce some temporarily disturbing effects, such as irritability, "hot flashes," extreme excitability, or other minor disturbances of the nervous and digestive systems. As a rule the better a woman's state of health, the less traumatic this period will be.)

VIII. Terms and definitions associated with the urinary system

A. Nephrology--Study of the kidney

(NOTE: *Nephro* means kidney.)

B. Excretion--Removing waste products of cell metabolism from the blood and lymph

C. Secretion--Process of giving off a specific product as a result of gland activity

D. Elimination--Discharge of indigestible materials and waste products of metabolism from the body

E. Hepatic--Pertaining to the liver

F. Adrenal--Near the kidney

(NOTE: The gland that curves over kidney is known as the adrenal gland.)

G. Renal--Pertaining to the kidney

H. Ureter--Tube which carries urine from kidney to bladder

I. Urethra--Tube for carrying urine from bladder to outside of body

J. Urinary meatus--External opening of urethra

K. Vascular--Pertaining to or composed of blood vessels

L. Nephron--Basic functional unit of kidneys that acts as a filtering unit for circulatory system

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INFORMATION SHEET

M. Urology--Study of the urinary system

N. Micturation--To urinate or void

IX. Structures of the urinary system (Transparency 7)

A. Adrenal gland

B. Kidney

C. Renal artery

D. Renal vein

E. Ureter

F. Urinary bladder

G. Prostate gland

(NOTE: This gland is found only in the male.)

H. Urethra

X. Functions of the urinary system

A. Filtration and excretion of waste products

(NOTE: Urine is composed mainly of water, salts, and waste products containing nitrogen.)

B. Assistance in maintaining the body's water balance

C. Regulation of the body's acid-base balance

XI. Characteristics of the male and female urethra

A. Male

1. Part of both reproductive and urinary systems

2. Length of approximately 20 cm (8 in) in the adult

3. Passage through the prostate gland, where two ducts from the male reproductive glands join it, and through the penis to the outside

B. Female

1. Thin-walled, relatively short tube approximately 4 cm (1.7 in) long

2. Embedded in the anterior muscle wall of the vagina

(NOTE: In both male and female, the meatus is controlled by a voluntary sphincter.)

INFORMATION SHEET

XII. Normal and abnormal components of urine

A. Normal

1. Water (95 percent)

2. Protein waste products, such as urea, uric acid, and creatinine

   (NOTE: When kidney function is impaired, waste products may accumulate in the blood. This is called uremia.)

3. Mineral salts including sodium chloride, sulfates, and phosphate

4. Yellow pigment from certain bile compounds

5. Toxins

6. Hormones

B. Abnormal

1. Glucose

   (NOTE: Glucose in the urine is a condition known as glycosuria.)

2. Albumin

   (NOTE: Albumin in the urine is a condition known as albuminuria.)

3. Blood

   (NOTE: Blood in the urine is a condition known as hematuria.)

4. Pus cells

   (NOTE: Pus cells in the urine is a condition known as pyuria.)

5. Acetone

   (NOTE: Acetone in the urine is a condition known as acetonuria.)

6. Casts

XIII. Characteristics of urine

A. Total volume in twenty-four hours--1500 cc (approximately)

B. Color--Straw

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INFORMATION SHEET

C. Appearance--Clear

D. Odor--Mild, aromatic

(NOTE: After standing, urine begins to smell of ammonia.)

E. Reaction (pH)--6.0 or slightly acid

F. Specific gravity--1.015 to 1.025

(NOTE: This is a little heavier than distilled water.)

XIV. Maintenance of a healthy urinary system

A. Adequate diet including basic four food groups daily

B. Sufficient daily intake of water for optimum function

(NOTE: Average adult requires six to eight glasses of water daily.)

C. Avoidance of drugs or other substances that may damage kidneys

D. Cleanliness to avoid urinary tract infections in self and others

1. Thorough handwashing before preparing or handling foods or materials to be given by intravenous or intramuscular injections

2. Thorough handwashing after using the toilet

3. Bathing as needed for bodily cleanliness

(NOTE: The urethral meatus in the female is exposed to vaginal, uterine, and rectal discharges throughout life; this subjects the delicate urethral structures to irritation and bacterial invasion.)

4. Following use of toilet, females should cleanse from front to back

E. Prompt medical treatment of urinary tract infection

F. Proper care and handling of foods

(NOTE: Several of the bacteria which cause gastrointestinal infections may also cause infection of the genitourinary tract.)

XV. Terms and definitions associated with collecting urine specimens

A. Catheter--Tubular instrument of rubber, plastic, metal, or other material used for draining or injecting fluids through a body passage

[illegible] determination of the reaction of cultured organisms

INFORMATION SHEET

C. Requisition--Written request for a test or service available but not automatically performed

D. Specimen--Small sample or part taken to show the nature of the whole

E. Meatus--Opening or passage

F. Vulva--External parts of the female reproductive system that surround the opening of the vagina

G. Clean catch or midstream urine specimen--Urine collected by method to insure as clean a specimen as possible

(NOTE: This is not a sterile specimen.)

H. Twenty-four hour urine specimen--Urine collected over a twenty-four hour period

XVI. Characteristics to observe about urination

A. Amount of urine

B. Frequency, urgency, discomfort, or pain

C. Color and transparency of urine

D. Unusual odor of urine

(NOTE: Normal urine is clear and light yellow in color with a characteristic odor.)

XVII. Conditions relating to the urinary tract

A. Renal calculus--Kidney stone

B. Albuminuria--Presence of albumin in the urine

C. Hematuria--Presence of blood in the urine

D. Glycosuria--Presence of glucose in the urine

E. Dysuria--Painful urination

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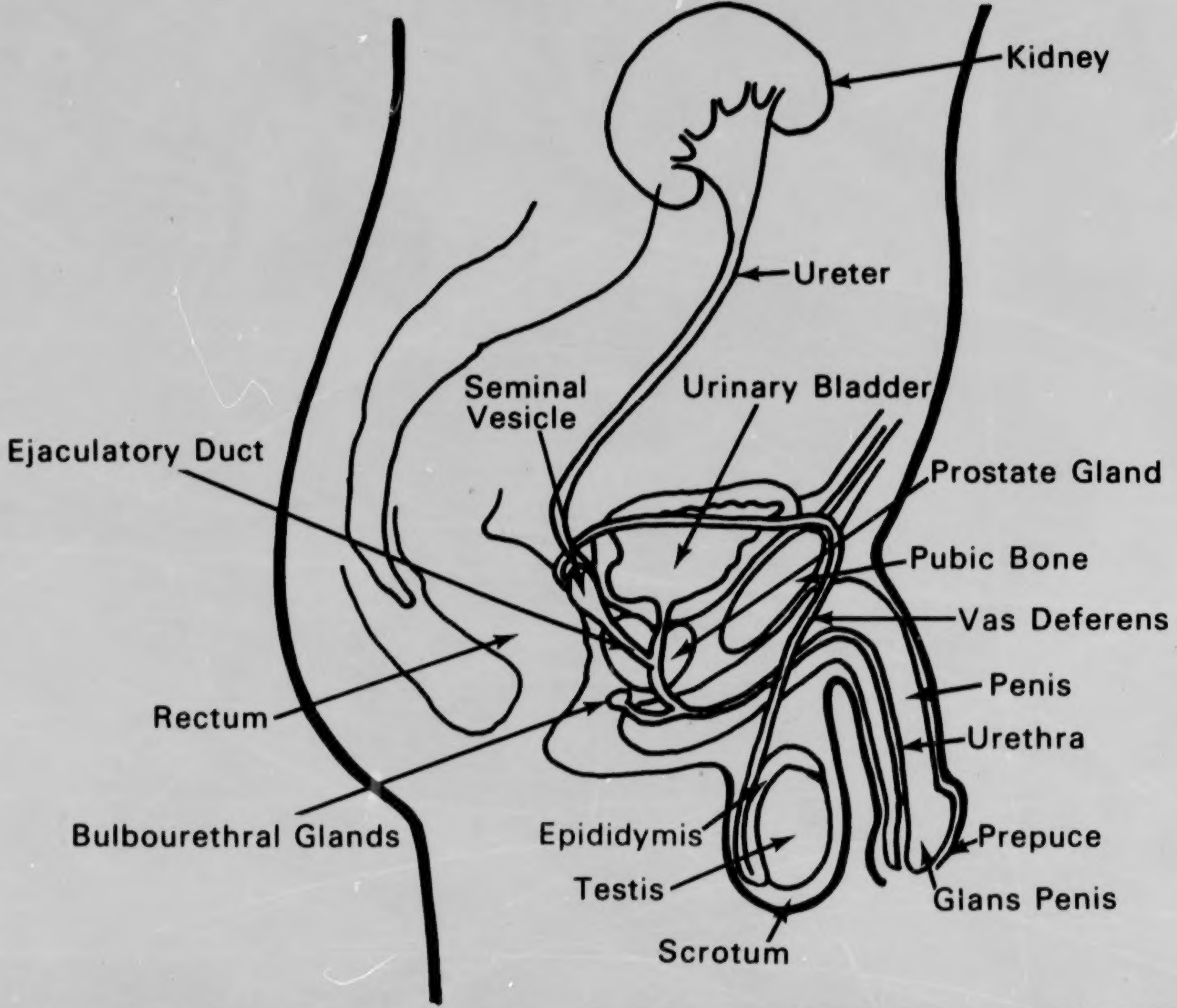
Male Reproductive System



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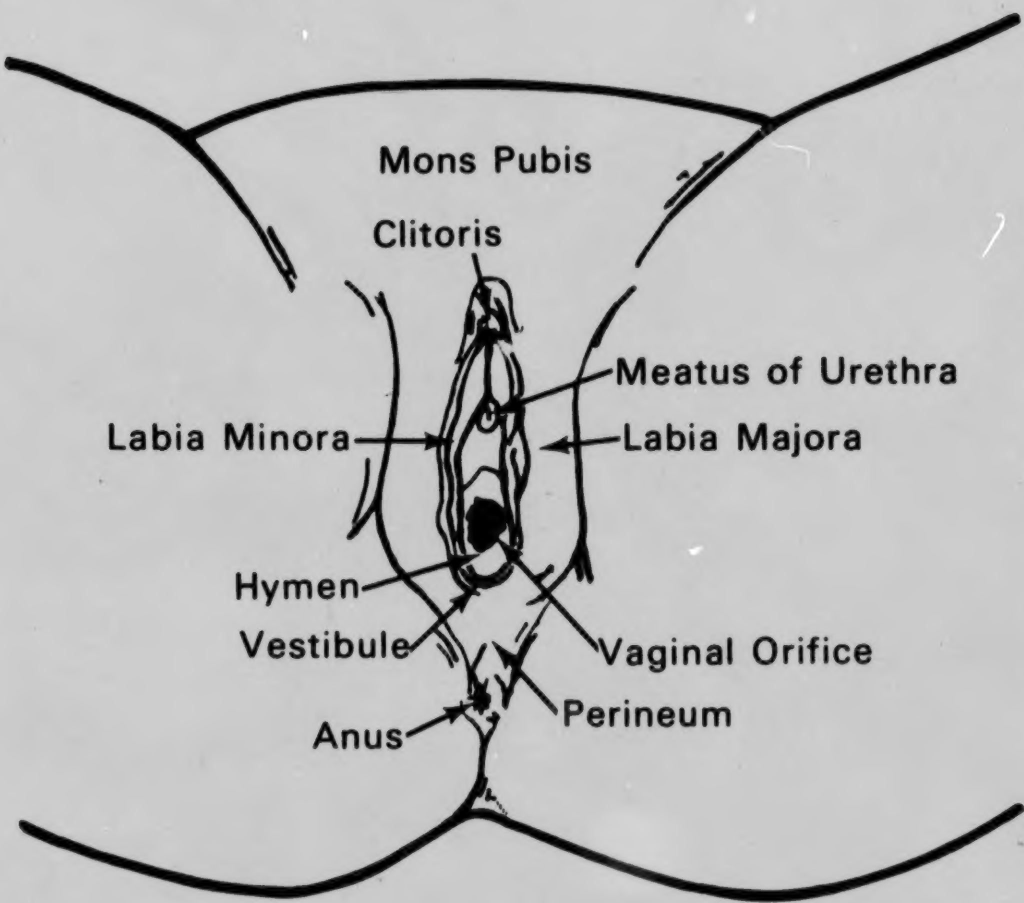
Female Reproductive System

EXTERNAL ORGANS



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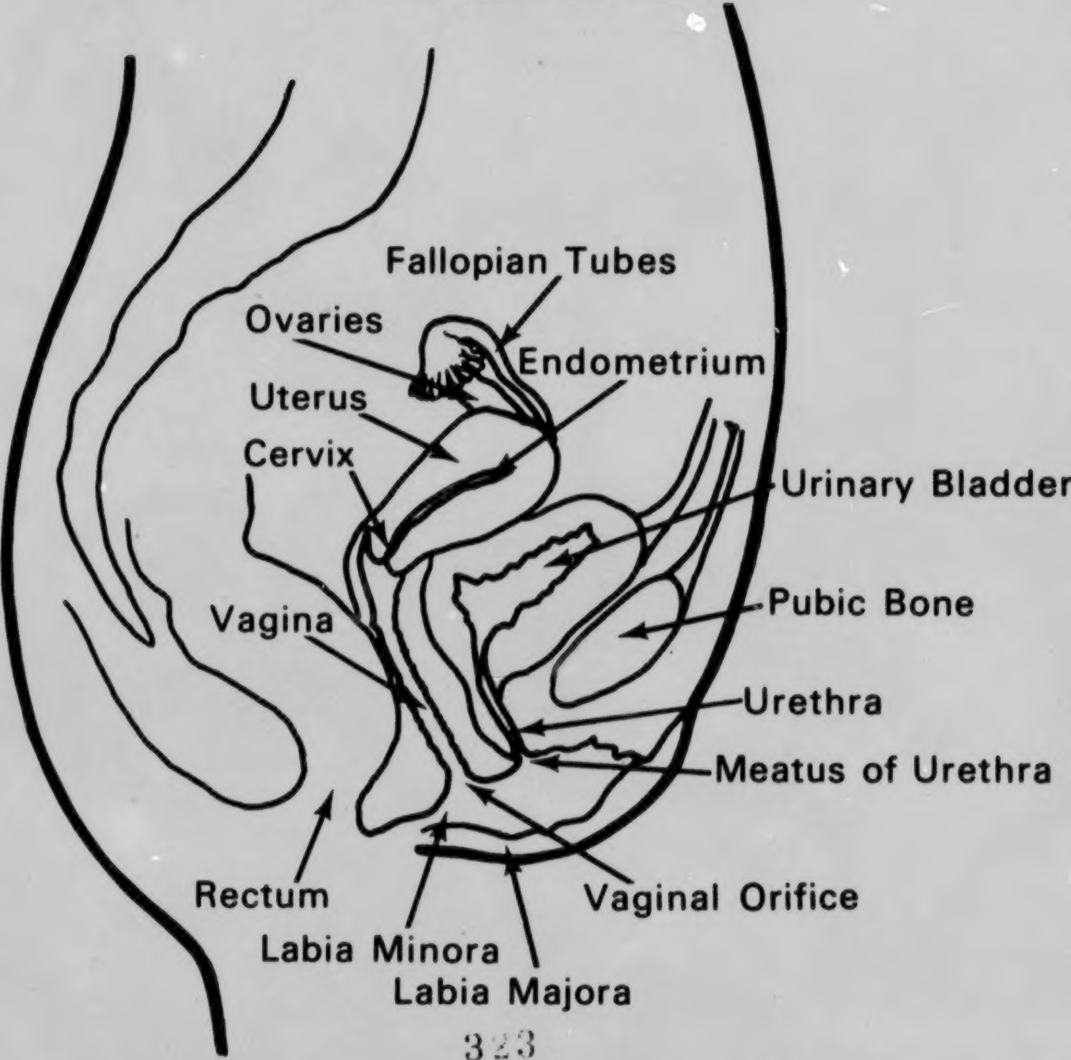
TM 2

Female Reproductive System

INTERNAL ORGANS



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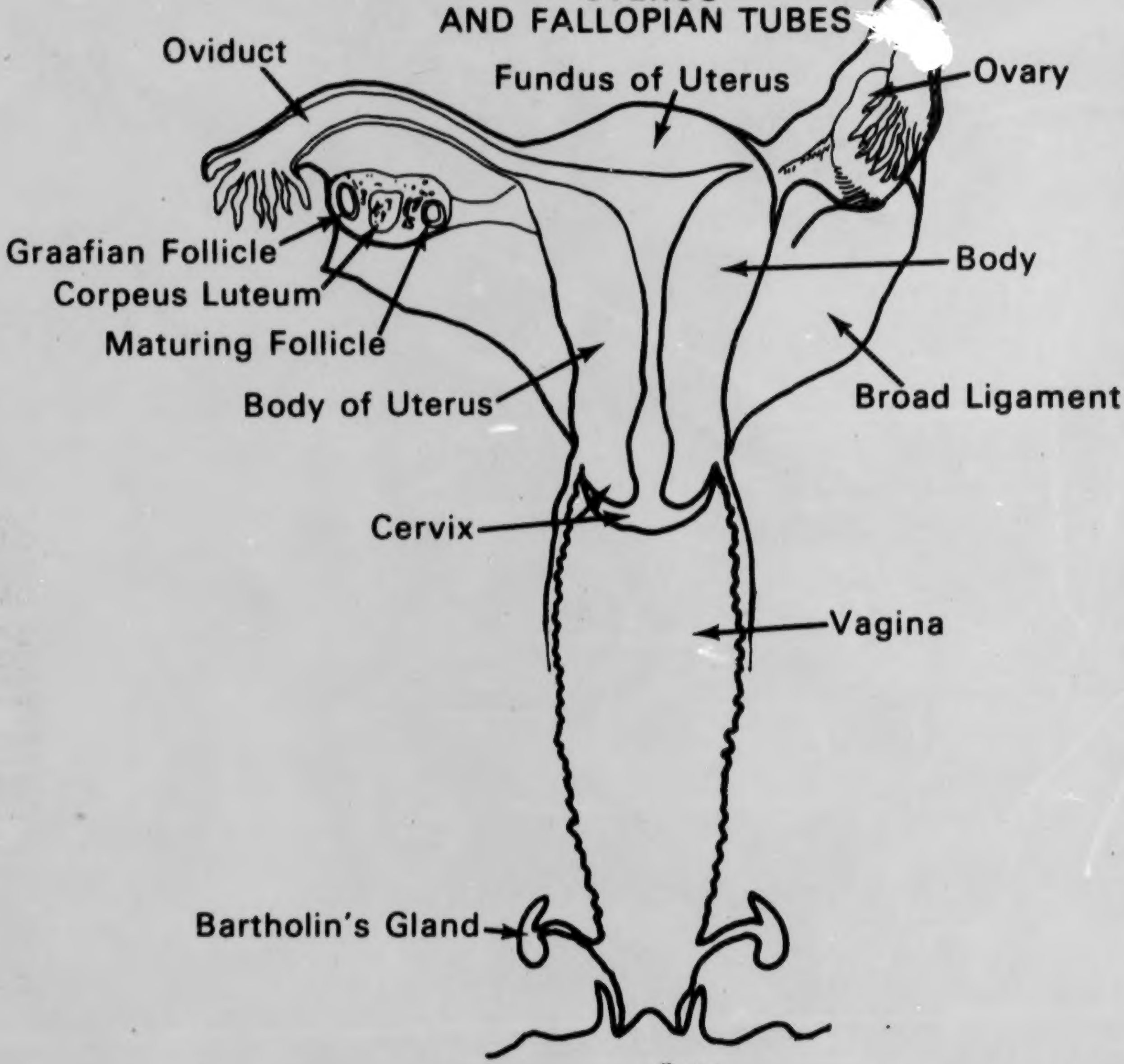
TM 3

Female Reproductive System

UTERUS
AND FALLOPIAN TUBES



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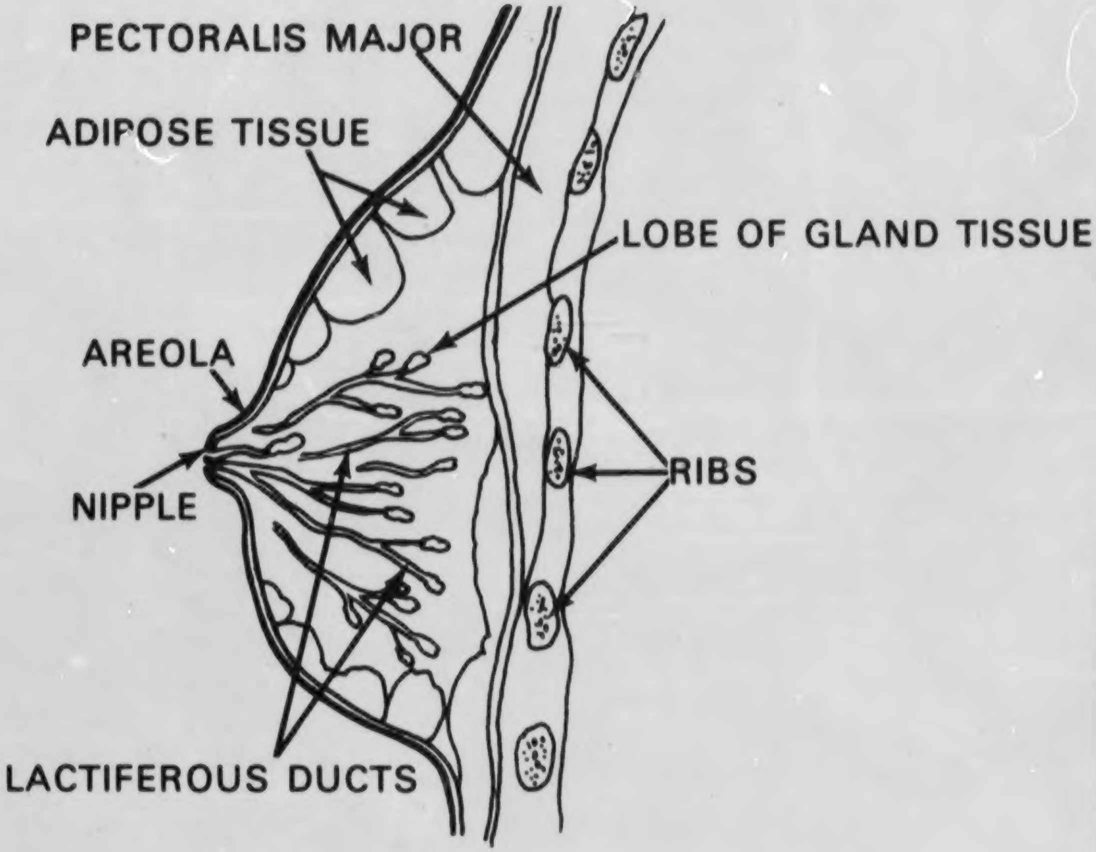
The Breast



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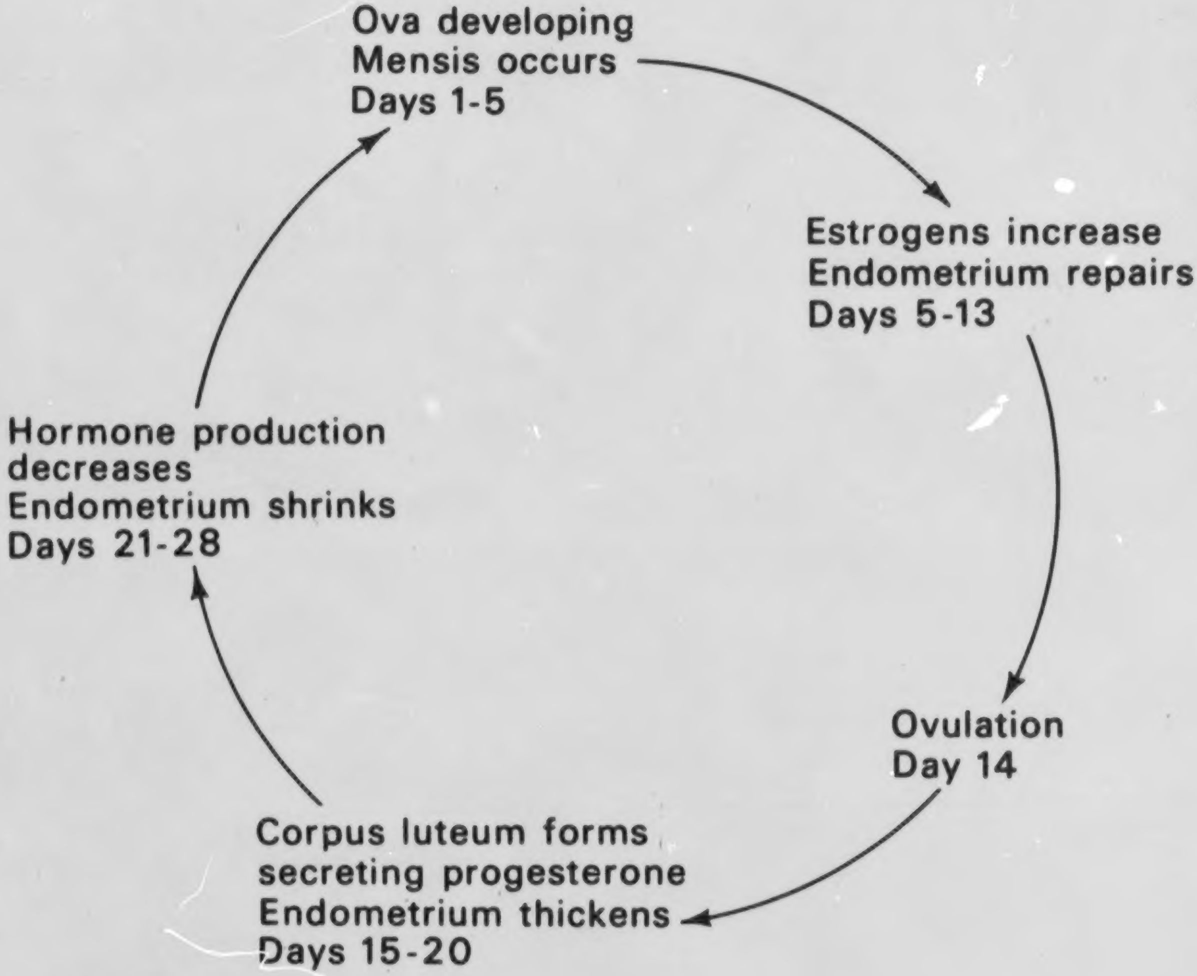
The Menstrual Cycle



Ova developing
Mensis occurs
Days 1-5

Estrogens increase
Endometrium repairs
Days 5-13

Ovulation
Day 14

Corpus luteum forms
secreting progesterone
Endometrium thickens
Days 15-20

Hormone production
decreases
Endometrium shrinks
Days 21-28

Days Indicated Are Approximate

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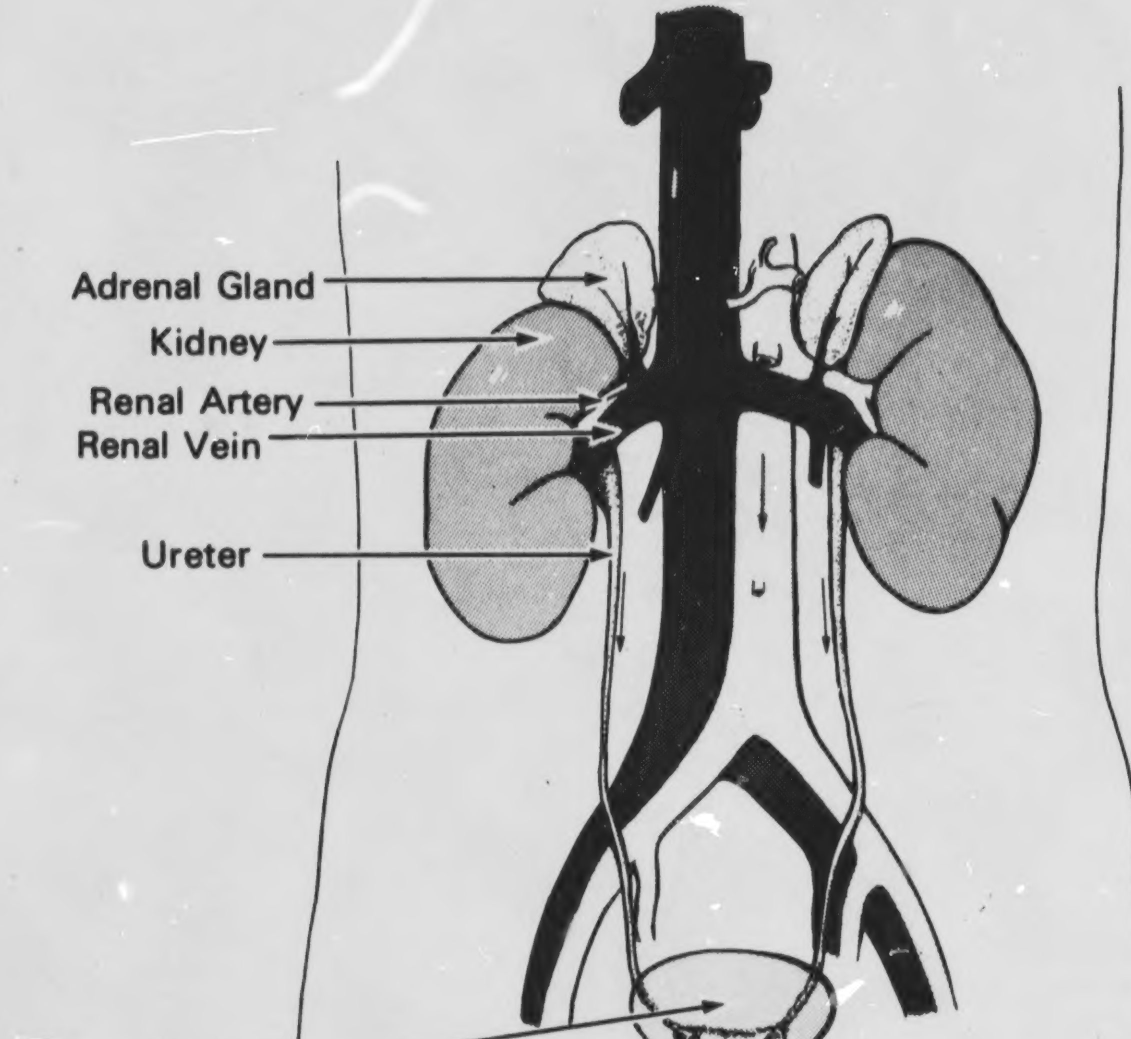
The Urinary System



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GENITOURINARY SYSTEM
UNIT IV

ASSIGNMENT SHEET #1--WRITE ESSAY ON REPRODUCTIVE SYSTEM

Write an essay on a current issue dealing with some aspect of the male or female reproductive system, such as new birth control methods, including forms of sterilization, or medications dealing with the system. You might want to make a list of false ideas about menstruation and menopause or discuss ways this unit has changed your thinking about menstruation and menopause.

(NOTE: Your teacher may want you to give this as a verbal report.)

GENITOURINARY SYSTEM
UNIT IV

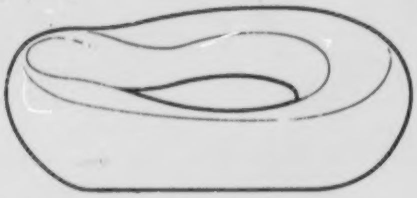
JOB SHEET #1--GIVE AND REMOVE BEDPAN AND/OR URINAL

I. Equipment needed

  A. Bedpan and/or urinal

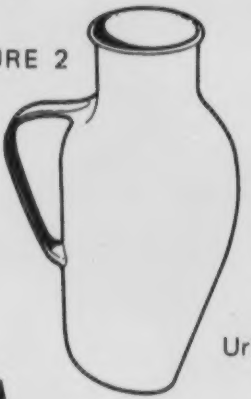
  (NOTE: Patients who are in casts or are unable to use a conventional bedpan may use a fracture pan. See Figures 1, 2, and 3.)

FIGURE 1



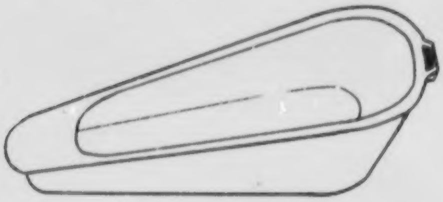
Bedpan

FIGURE 2



Urinal

FIGURE 3



Fracture Pan

  B. Bedpan cover

  C. Toilet tissue

  D. Wash basin

  E. Soap

  F. Towel

II. Procedure for giving bedpan

  A. Wash hands

  B. Warm bedpan; cover and take to patient's bedside

  C. Provide privacy

  D. Turn back upper bedding part way without exposing patient

JOB SHEET #1

E. Place patient on bedpan

  1. If patient can help

    a. Instruct patient to raise hips by flexing knees and resting weight on heels

    b. Support lower back with one hand and slip bedpan in place with the other

  2. If patient is unable to help

    a. Level bed and turn patient onto side, flexing leg

    b. Slip bedpan as far as possible under patient's hips

    c. Turn patient onto bedpan while holding bedpan

F. Raise backrest, if permitted

G. Place toilet tissue within reach

H. Place communication device within reach and instruct patient to call for assistance or service when needed

I. Leave patient alone if permitted, but return frequently to check

J. Answer the patient's signal promptly

K. Remove bedpan

  1. If the patient can help

    a. Assist patient to raise hips by slipping hand under small of back and helping patient to raise buttocks

    b. Remove bedpan and cover

  2. If the patient is unable to assist

    a. Level bed; holding bedpan, turn patient to side

    b. Remove bedpan and cover

L. Cleanse patient as necessary

  1. Clean area with toilet tissue with patient on side; place soiled tissue in bedpan; cover bedpan

  2. Wash with soapy water, if necessary, and rinse

  3. Dry well

JOB SHEET #1

M. Make patient comfortable

  1. Straighten bedding

  2. Readjust bed to desired position

  3. Remove screen

N. Remove bedpan from unit

  1. Look at contents of bedpan before emptying

  2. Empty contents into toilet

  3. Rinse with cold water; cleanse thoroughly according to institution's procedure

O. Wash hands

P. Provide soap and basin of water for patient to wash hands, if needed

Q. Report and record the color, amount, odor, and consistency of feces or urine

III. Procedure for giving urinal

A. Take covered urinal to patient's bedside

B. Place covered urinal within reach of patient if patient is able to care for self

C. For patient who needs assistance

  1. Expose patient, as needed

  2. Separate the patient's legs to permit placement of urinal

  3. Place penis into the urinal far enough that it does not slip out as the patient begins to urinate

  4. Hold urinal in place, if necessary

D. Place communication device within reach if patient uses urinal unassisted

E. Remove covered urinal from unit

  1. Measure urine, if necessary

  2. Save specimen, if needed

JOB SHEET #1

F. Rinse urinal with cold water; use brush if necessary; return to storage

G. Wash hands

H. Assist patient to wash hands

I. Make patient comfortable

J. Wash hands

K. Record amount and characteristics of urine

GENITOURINARY SYSTEM
UNIT IV

JOB SHEET #2--ASSIST THE PATIENT TO THE BATHROOM

Procedure

A. Adjust bed to lowest position or place footstool for patient

B. Help patient sit on edge of bed

C. Put slippers and robe on patient

D. Help patient to stand, giving necessary support while walking to the bathroom

E. Help patient to sit on toilet

F. Remain nearby to offer assistance as needed

G. Have patient wash hands when finished

H. Help patient return to bed

I. Provide for patient's comfort

J. Wash hands

K. Record elimination

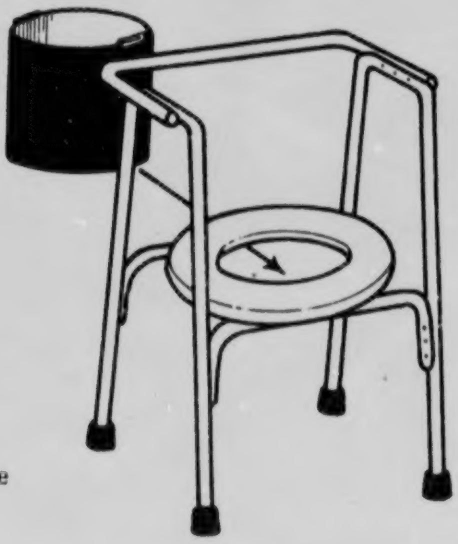
GENITOURINARY SYSTEM
UNIT IV

JOB SHEET #3--ASSIST THE PATIENT IN USING THE COMMODE

I. Equipment needed

   A. Commode chair (Figure 1)

FIGURE 1



   B. Toilet tissue

   C. Bathrobe

   D. Slippers

II. Procedure

   A. Take commode to bedside and place conveniently

   B. Lock wheels of commode chair

   C. Prepare patient

      1. Assist patient to sitting position in bed

      2. Dress patient in bathrobe and slippers

   D. Assist patient out of bed and onto commode

   E. Place communication device within reach and leave patient

   F. Check patient as needed

   G. Assist in cleansing patient as necessary

JOB SHEET #3

H. Assist patient's return to bed

I. Wash patient's hands

J. Examine and measure the contents in removable chamber

K. Clean commode and replace the removable chamber

L. Wash hands

M. Record elimination

GENITOURINARY SYSTEM
UNIT IV

JOB SHEET #4--COLLECT A URINE SPECIMEN

I. Equipment needed

  A. Bedpan or urinal

  B. Covered specimen container

  C. Label

  D. Requisition

  E. Graduate

II. Procedure

  A. Wash hands

  B. Fill out label and laboratory requisition

  C. Identify patient and explain procedure

  D. Provide privacy

  E. Give bedpan or urinal

  F. Take bedpan or urinal to utility room after voiding

  G. Pour urine into a graduate

  H. Pour at least 120 cc (four ounces) into the specimen container

  I. Cover specimen container, attach label, and set in safe place

  J. Clean bedpan and return to designated area

  K. Provide for patient's comfort

  L. Wash hands

  M. Take or send specimen to laboratory

  N. Chart procedure and observations

GENITOURINARY SYSTEM
UNIT IV

JOB SHEET #5--OBTAIN A CLEAN CATCH OR MIDSTREAM URINE SPECIMEN

(NOTE: Urine usually collected to examine for microorganisms and other abnormal substances may be done as routine.)

I. Equipment needed

   A. Sterile urine specimen bottle with cover

   B. Label

   C. Requisition

   D. Cleaning agent

   E. Water

   F. Cotton balls

   G. Sterile gloves (for health assistant)

II. Procedure for female ambulatory patient

   A. Fill out label and laboratory requisition

   B. Wash hands

   C. Assemble equipment and take to bedside

   D. Instruct patient

      1. Cleanse area from front to back while holding labia open with thumb and index finger. Use one cotton ball for each stroke

      2. Repeat cleansing three more times, once on each side of labia and once down center over urinary meatus

      3. Begin voiding, allowing first stream to flow into toilet while still spreading labia

      4. Catch only the midstream urine in a sterile specimen bottle

         (NOTE: If clean catch kit is used, follow manufacturer's instructions.)

      5. Complete voiding in toilet

      6. Cover specimen bottle

JOB SHEET #5

E. Rinse and dry outside of bottle after specimen is obtained

F. Wash hands

G. Label and take or send the specimen to the laboratory

H. Care for equipment

I. Report and record the procedure

(NOTE: For bed patient, procedure is similar except patient is placed on bedpan and assisted as needed by health assistant.)

III. Procedure for male ambulatory patient

A. Fill out label and laboratory requisition

B. Wash hands

C. Assemble equipment and take to bedside

D. Identify patient and explain procedure

E. Instruct patient

1. Cleanse the glans penis with a circular motion, beginning at the meatus and working away from it

2. Repeat cleansing with three or four cotton balls and the cleansing solution

3. Rinse with water

4. Void a small amount into the toilet

5. Catch only the midstream urine in a sterile specimen bottle

6. Complete voiding in toilet

7. Cover specimen bottle

F. Rinse and dry the outside of the bottle

G. Wash hands

H. Label and take or send the specimen to the laboratory

I. Care for equipment

J. Report and record the procedure

(NOTE: For bed patient, procedure is similar except patient is placed on the bedpan and assisted as needed by the health assistant.)

GENITOURINARY SYSTEM
UNIT IV

JOB SHEET #6--COLLECT A TWENTY-FOUR HOUR SPECIMEN

I. Equipment needed

- A. Receptacle for storing urine
- B. Bedpan or urinal
- C. Graduate
- D. Labels
- E. Requisition

II. Procedure

A. Wash hands as needed throughout this procedure

B. Obtain storage receptacles from laboratory and label them

(NOTE: Many tests require a preservative; laboratory will add it to receptacle if notified.)

C. Place receptacles in designated area

D. Give a detailed explanation of the procedure to the patient; stress the importance of collecting all the urine passed during the required time

E. Place signs at the patient's bedside and in the bathroom utility room stating that a twenty-four hour urine specimen is being kept

(NOTE: Information should include type of specimen needed, hour and day started, hour and day when test will be finished, and also such information as ice needed to pack specimen.)

F. Inform patient if he/she is on a specific liquid intake

G. Have patient void at the beginning of the time period and DISCARD this specimen; all other urine for the specified time period will be saved, measured, and poured into the storage receptacle

H. Have patient void at the end of the time period and add this last specimen to the collection

I. Inform the patient when the collection is completed, and remove the signs

J. Label and take or send the specimens to the laboratory

JOB SHEET #6

K. Report and record the procedure

(NOTE: These directions can be used for a cumulative or fractional twenty-four hour specimen. If the urine is to be collected for three or four time periods during the twenty-four hour period, the initial specimen is discarded; all other specimens, including the one at the end of the time period, are saved. At the end of each period, the collected urine is labeled and sent to the laboratory with the proper requisition.)

GENITOURINARY SYSTEM
UNIT IV

JOB SHEET #7--GIVE CATHETER CARE

(NOTE: A urinary catheter is a foreign object to the body and many times a pathway for microorganisms to enter the urinary tract causing infection. To avoid this problem, catheter care is usually given twice a day.

I. Equipment

  A. Wash cloth and towel

  B. Soap

  C. Gloves

  D. Solution

  (NOTE: Each institution will have its own accepted antiseptic solution to cleanse the catheter. This may be followed by an application of an antibiotic or antiseptic ointment.)

  E. Tape (adhesive or paper)

II. Procedure

  A. Wash hands

  B. Assemble equipment at bedside

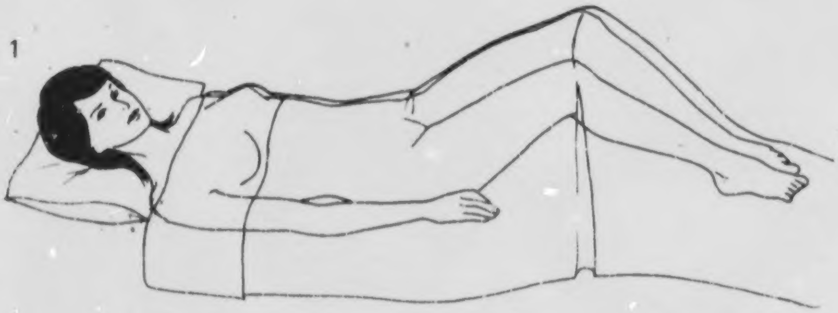
  C. Identify patient and explain procedure

  D. Provide privacy

  E. Place patient in position; spread bath blanket over patient and fold top covers to bottom of bed

  (NOTE: Females may assume a dorsal recumbent position [Figure 1] and males may remain on back or side.)

FIGURE 1



JOB SHEET #7

F. Prepare wash cloth using warm water and small amount of mild soap

G. Cleanse area around meatus where catheter enters using downward strokes; be careful not to bring cloth back up over clean areas

(NOTE: Labia on female patients need to be gently spread open and cleansed well. It may also be possible to do perineal care at this time.)

H. Rinse area and pat dry

I. Apply solution around the catheter tubing beginning with area close to entrance of body; cleanse approximately 10.16 cm (4 in) on tubing

J. Apply ointment, if necessary

K. Check to see if tape used to secure tubing to patient's leg is soiled or not secure; remove tape and clean tubing, if necessary; secure with fresh tape

L. Observe the catheter collecting bag and the characteristics of the urine as it may be time to change the tubing or bag

M. Return patient to a comfortable position, replacing top linens and removing bath blanket

N. Dispose of equipment properly

GENITOURINARY SYSTEM
UNIT IV

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with the genitourinary system to their correct definitions by placing the correct numbers in the blanks provided.

_____a. Area between external genitalia and anus

_____b. Head of penis

_____c. Male reproductive cell

_____d. External female genitalia

_____e. Period at which one becomes capable of reproduction

_____f. Study of diseases of female reproductive system

_____g. Fold of skin over glans penis

_____h. Mucous membrane lining of the uterus

_____i. Fold of peritoneum that supports uterus

_____j. External pouch containing testes

_____k. Thick, white secretion of male reproductive glands

_____l. Cord suspending the testes; composed of veins, arteries, lymphatics, nerves, and vas deferens

_____m. Beginning of menstruation

_____n. Female reproductive cell

_____o. Pertaining to os pubis, anterior bone of the pelvis

_____p. Sexual intercourse

1. Gynecology
2. Semen
3. Puberty
4. Scrotum
5. Spermatazoa
6. Copulation
7. Pubic
8. Endometrium
9. Vulva
10. Perineum
11. Broad ligament
12. Menarche
13. Spermatic cord
14. Glans penis
15. Prepuce
16. Ovum

_____q. Normal condition that results in permanent cessation of menstrual activity

_____r. Thin-walled cavity in ovary enclosing a developing ovum

_____s. Thick, sticky

_____t. Capable of maintaining an independent existence

_____u. Surgical removal of prepuce

_____v. Process by which sperm unites with ovum

_____w. Process by which living organism produces a new individual of same kind

_____x. Period that marks the cessation of reproductive function in female or diminishing testicular activity in male

_____y. Periodic discharge of blood and tissue from nonpregnant uterus

_____z. Glands of breast which secrete milk

____aa. Ducts which convey milk

17. Viscid
18. Graafian follicle
19. Menopause
20. Circumcision
21. Lactiferous ducts
22. Mammary glands
23. Menstruation
24. Viable
25. Climacteric
26. Fertilization
27. Reproduction

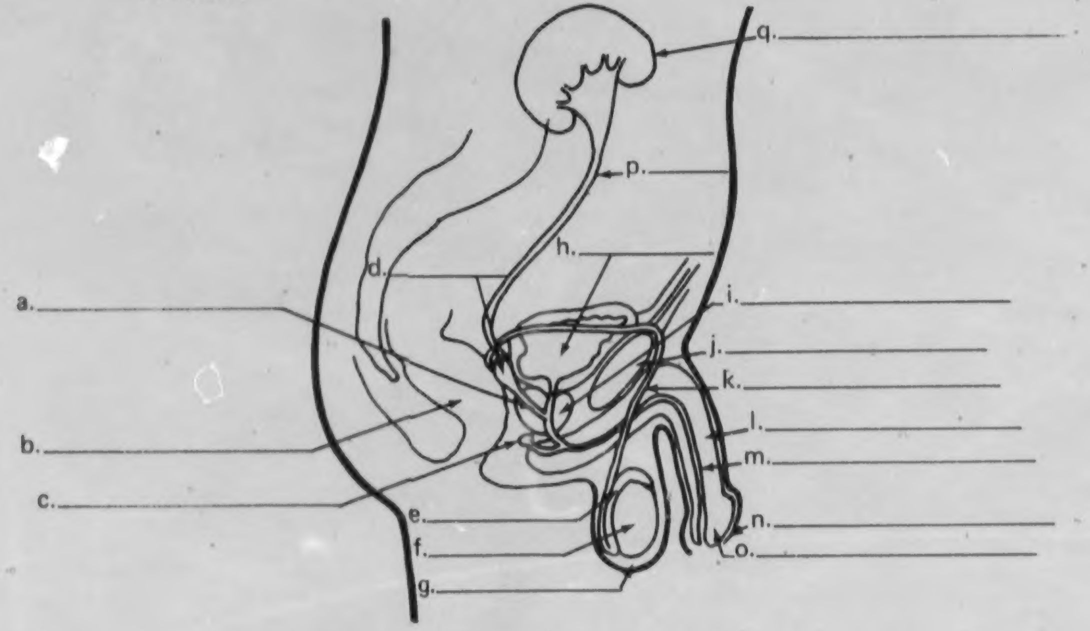
2. Name functions of the male and female reproductive systems.

a. ____

b. ____

c. ____

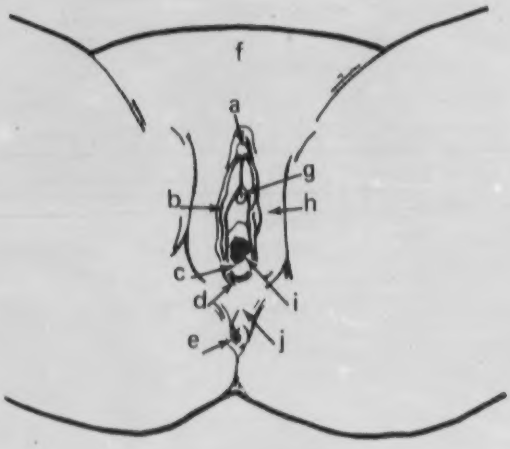
3. Identify on the diagram below parts of the male reproductive system and adjacent structures.



4. Identify on the diagrams below parts of the female reproductive system.

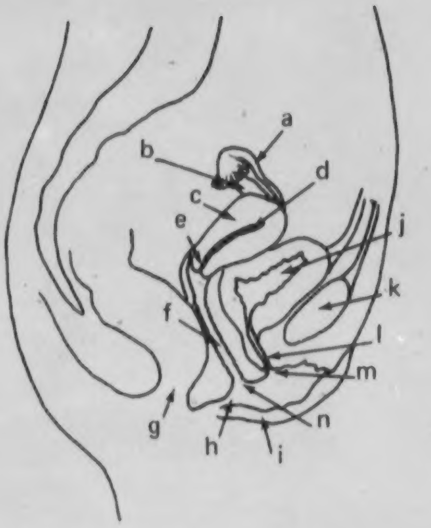
External organs

a. ______________________
b. ______________________
c. ______________________
d. ______________________
e. ______________________
f. ______________________
g. ______________________
h. ______________________
i. ______________________
j. ______________________



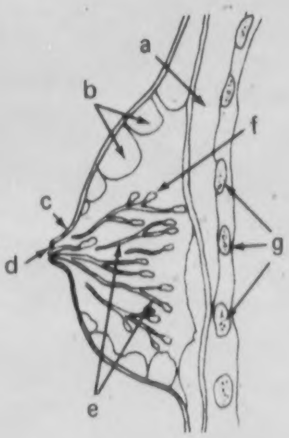
Internal organs

a. ____________________
b. ____________________
c. ____________________
d. ____________________
e. ____________________
f. ____________________
g. ____________________
h. ____________________
i. ____________________
j. ____________________
k. ____________________
l. ____________________
m. ____________________
n. ____________________



Breast

a. ____________________
b. ____________________
c. ____________________
d. ____________________
e. ____________________
f. ____________________
g. ____________________
h. ____________________
i. ____________________
j. ____________________
k. ____________________



5. Match male and female external and internal reproductive organs on the right to their functions by placing the correct numbers in the blanks.

External Male Organs

_____a. Collects and stores sperm while maturing; conducts sperm to outside
_____b. Carries semen into vagina during copulation; carries urine from bladder
_____c. Produces sperm and testosterone
_____d. Protects testes; regulates and maintains favorable temperature for sperm production
_____e. Transports sperm from testes to urethra

1. Scrotum
2. Testes
3. Epididymis
4. Vas deferens
5. Penis and urethra

Internal Male Organs

______a. Transports sperm from testes to urethra

______b. Secrete viscid alkaline fluid which removes urine residue; secrete mucus for lubrication

______c. Contribute essential components to semen

______d. Secretes alkaline fluids which enhance sperm mobility; contracts smooth muscles to aid in ejaculation

1. Seminal vesicles
2. Prostate gland
3. Bulbourethral or Cowper's glands
4. Vas deferens

External Female Organs

______a. Sexual excitation

______b. Opening of vagina

______c. Protection of pubic bone

______d. Pelvic floor

______e. Lactation (secretion of milk)

______f. Regulation of urine flow

______g. Enclose the vestibule

______h. Surround labia minora

1. Mammary glands (breasts)
2. Mons pubis
3. Labia majora
4. Labia minora
5. Clitoris
6. Urethral orifice
7. Vaginal orifice
8. Perineum

Internal Female Organs

______a. Menstruation; during pregnancy protection and nourishment of fertilized ovum until it becomes a viable infant

______b. Movement of ova from ovaries to uterus; where fertilization usually takes place

______c. Reception of penis during copulation; passageway for infant during birth

______d. Production of hormones and ova; usually, only one ovum is produced once a month from alternate ovaries

______e. Secretion of lubricating fluid

1. Vagina
2. Uterus
3. Fallopian tubes (two)
4. Ovaries (two)
5. Bartholin's and Skene's glands

6. Match the stages of the 28-day menstrual cycle to their descriptions.

______a. Corpus luteum forms, secreting progesterone; endometrium thickens

______b. Hormone production decreases; endometrium shrinks

______c. Usually menstruation occurs; one of the many ova enclosed in a Graafian follicle begins to mature

______d. During this period of ovum maturation, the Graafian follicle produces estrogen under the control of the pituitary gland, and the endometrium repairs and begins to thicken

______e. Ovulation occurs; Graafian follicle ruptures, and ovum is released into the abdominal cavity; fringed end of fallopian tube brings ovum into tube where it is propelled to uterus

1. Days one through five
2. Days five through thirteen
3. By day fourteen
4. Days fifteen through twenty
5. Days twenty-one through twenty-eight

7. Select from the list below characteristics of menopause. Place an "X" in the appropriate blanks.

______a. Atrophy of pectoral muscles

______b. Absence of libido

______c. Production of estrogen diminishes when ovaries become scar tissue as they atrophy

______d. Recurrent pelvic cramps

______e. Atrophy of uterus, fallopian tubes, vagina, and vulva occur because of lack of estrogen

8. Match terms associated with the urinary system on the right to their correct definitions on the left. Place the correct numbers in the appropriate blanks.

______a. Tube which carries urine from kidney to bladder

______b. Pertaining to or composed of blood vessels

______c. Study of the kidney

______d. To urinate or void

______e. Study of the urinary system

1. Urology
2. Vascular
3. Nephrology
4. Ureter
5. Micturation

_____f. Tube for carrying urine from bladder to outside of body

_____g. Discharge of indigestible materials and waste products of metabolism from the body

_____h. Process of giving off a specific product as a result of gland activity

_____i. External opening of urethra

_____j. Removing waste products of cell metabolism from the blood and lymph

_____k. Basic functional unit of kidneys that acts as a filtering unit for the circulatory system

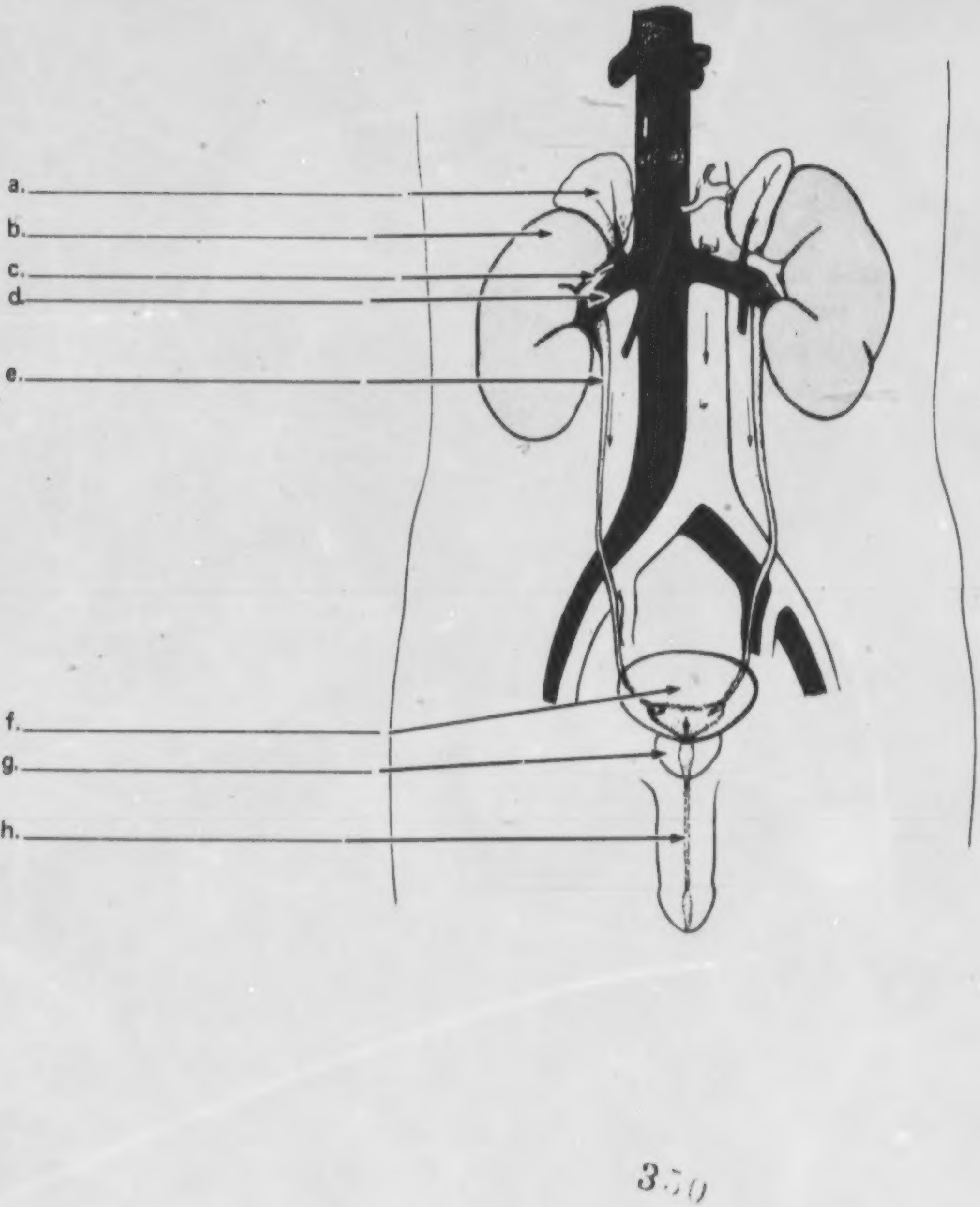
_____l. Pertaining to the liver

_____m. Near the kidney

_____n. Pertaining to the kidney

6. Nephron
7. Elimination
8. Excretion
9. Hepatic
10. Secretion
11. Urethra
12. Renal
13. Adrenal
14. Urinary meatus

9. Identify major parts of the urinary system on the diagram below.



10. Name the main functions of the urinary system.

a. ______________________________

b. ______________________________

c. ______________________________

11. Classify characteristics of the male and female urethra by placing an "M" for characteristics of male urethra and an "F" for characteristics of female urethra in the blanks provided.

_____a. Length of approximately 20 cm (8 in) in the adult

_____b. Thin-walled, relatively short tube approximately 4 cm (1.7 in) long

_____c. Part of both reproductive and urinary systems

_____d. Embedded in the anterior muscle wall of the vagina

_____e. Passage through the prostate gland, where two ducts from the male reproductive glands join it, and through the penis to the outside

12. Distinguish between normal and abnormal components of urine by placing an "N" for normal components and an "A" for abnormal components in the blanks provided.

_____a. Water

_____b. Casts

_____c. Protein waste products such as urea, uric acid, and creatinine

_____d. Hormones

_____e. Yellow pigment from certain bile compounds

_____f. Blood

_____g. Glucose

_____h. Albumin

_____i. Toxins

_____j. Pus cells

_____k. Mineral salts including sodium chloride, sulfates, and phosphates

_____l. Acetone

13. Describe the characteristics of normal urine in the blanks provided.

a. Total volume in 24 hours--____________________

b. Color--____________________

c. Appearance--____________________

d. Odor--____________________

e. Reaction (pH)--____________________

f. Specific gravity--____________________

14. Name four ways to maintain a healthy urinary system.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

15. Match the terms associated with collecting urine specimens on the right to their correct definitions by placing the appropriate numbers in the blanks provided.

______a. External parts of the female reproductive system that surround the opening of the vagina

______b. Laboratory determination of the reaction of cultured organisms to various medications

______c. Tubular instrument of rubber, plastic, metal, or other material used for draining or injecting fluids through a body passage

______d. Written request for a test or service available but not automatically performed

______e. Opening or passage

______f. Small sample or part taken to show the nature of the whole

______g. Urine collected by method to insure as clean a specimen as possible

______h. Urine collected over a twenty-four hour period

1. Sensitivity
2. Requisition
3. Specimen
4. Meatus
5. Vulva
6. Catheter
7. Twenty-four hour urine specimen
8. Clean catch or midstream urine specimen

16. Name characteristics to observe about urination.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

17. Match the terms associated with conditions relating to the urinary tract to their correct definitions by placing the appropriate numbers in the blanks provided.

_____a. Kidney stone	1. Dysuria
_____b. Painful urination	2. Hematuria
_____c. Presence of albumin in the urine	3. Glycosuria
_____d. Presence of blood in the urine	4. Albuminuria
_____e. Presence of glucose in the urine	5. Renal calculus

18. Write essay on reproductive system.

19. Demonstrate the ability to:

a. Give and remove bedpan and/or urinal.

b. Assist patient to the bathroom.

c. Assist patient in using the commode.

d. Collect a urine specimen.

e. Obtain a clean catch or midstream urine specimen.

f. Collect a twenty-four hour urine specimen.

g. Give catheter care.

(NOTE: If the above activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

GENITOURINARY SYSTEM
UNIT IV

ANSWERS TO TEST

1\.
- a. 10
- b. 14
- c. 5
- d. 9
- e. 3
- f. 1
- g. 15
- h. 8
- i. 11
- j. 4
- k. 2
- l. 13
- m. 12
- n. 16
- o. 7
- p. 6
- q. 19
- r. 18
- s. 17
- t. 24
- u. 20
- v. 26
- w. 27
- x. 25
- y. 23
- z. 22
- aa. 21

2\.
- a. Perpetuation of the human species
- b. Sexual gratification
- c. Secretion of hormones

3\.
- a. Ejaculatory duct
- b. Rectum
- c. Bulbourethral glands
- d. Seminal vesicle
- e. Epididymis
- f. Testis or testicle
- g. Scrotum
- h. Urinary bladder
- i. Prostate gland
- j. Pubic bone
- k. Vas deferens
- l. Penis
- m. Urethra
- n. Prepuce
- o. Glans penis
- p. Ureter
- q. Kidney

4. External Organs
- a. Clitoris
- b. Labia minora
- c. Hymen
- d. Vestibule

e. Anus

f. Mons pubis

g. Meatus of urethra

h. Labia majora

i. Vaginal orifice

j. Perineum

Internal Organs

a. Fallopian tube

b. Ovaries

c. Uterus

d. Endometrium

e. Cervix

f. Vagina

g. Rectum

h. Labia minora

i. Labia majora

j. Urinary bladder

k. Pubic bone

l. Urethra

m. Meatus of urethra

n. Vaginal orifice

Breast

a. Pectoralis major

b. Adipose tissue

c. Areola

d. Nipple

e. Lactiferous ducts

f. Lobe of gland tissue

g. Ribs

5. External Male Organs

a. 3

b. 5

c. 2

d. 1

e. 4

Internal Male Organs

a. 4

b. 3

c. 1

d. 2

External Female Organs

a. 5

b. 7

c. 2

d. 8

e. 1

f. 6

g. 4

h. 3

Internal Female Organs

a. 2

b. 3

c. 1

d. 4

e. 5

6. a. 4

b. 5

c. 1

d. 2

e. 3

7. c, e

8. a. 4

b. 2

c. 3

d. 5

e. 1

f. 1

g. 7

h. 10

i. 14

j. 8

k. 6

l. 9

m. 13

n. 12

9. a. Adrenal gland

b. Kidney

c. Renal artery

d. Renal vein

e. Ureter

f. Urinary bladder

g. Prostate gland

h. Urethra

10. a. Filtration and excretion of waste products

b. Assistance in maintaining the body's water balance

c. Regulation of the body's acid-base balance

11. a. M

b. F

c. M

d. F

e. M

12. a. N

b. A

c. N

d. N

e. N

f. A

g. A

h. A

i. N

j. A

k. N

l. A

13. a. 1500 cc

b. Straw

c. Clear

d. Mild, aromatic

e. 6.0 or slightly acid

f. 1.015 to 1.025

14. Any four of the following:

    a. Adequate diet including basic four food groups daily

    b. Sufficient daily intake of water for optimum function

    c. Avoidance of drugs or other substances that may damage kidneys

    d. Cleanliness to avoid urinary tract infections in self and others

        1. Thorough handwashing before preparing or handling foods or materials to be given by intravenous or intramuscular injections

        2. Thorough handwashing after using the toilet

        3. Bathing as needed for bodily cleanliness

        4. Following use of toilet, females should cleanse from front to back

    e. Prompt medical treatment of urinary tract infection

    f. Proper care and handling of foods

15. a. 5

    b. 1

    c. 6

    d. 2

    e. 4

    f. 3

    g. 8

    h. 7

16. a. Amount of urine

    b. Frequency, urgency, discomfort, or pain

    c. Color and transparency of urine

    d. Unusual odor of urine

17. a. 5

    b. 1

    c. 4

    d. 2

    e. 3

18. Evaluated to the satisfaction of the instructor

19. Performance skills evaluated to the satisfaction of the instructor

RESPIRATORY SYSTEM
UNIT V

UNIT OBJECTIVE

After completion of this unit, the student should be able to identify the structures of the respiratory tract and name the functions of these parts. The student also should be able to select from a list aspects of protecting the respiratory system and measures to increase respiratory efficiency. The student should also be able to demonstrate the ability to prepare the two different systems of oxygen administration, name safety factors involved, and apply an oxygen cannula and mask. This will be evidenced through completion of the assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with the respiratory system to their correct definitions.
2. Name the fundamental purposes of breathing.
3. Identify structures of the respiratory system on a diagram.
4. Select from a list functions of the nasal cavities.
5. Match structures of the pharynx to their correct descriptions.
6. Classify functions of pharyngeal and laryngeal structures.
7. Classify functions of bronchi, bronchial structures, and trachea.
8. Describe the structure of the lungs.
9. Name practical aspects of protecting the respiratory system.
10. Select from a list measures that increase respiratory efficiency.
11. Name principles of oxygen administration.
12. Select from a list safety factors to observe when using oxygen.
13. Write essay on aspect of respiratory system.

14. Demonstrate the ability to:

    a. Prepare an oxygen cylinder for use.
    b. Prepare a piped-in oxygen unit for administration.
    c. Use a nasal cannula.
    d. Use an oxygen mask.
    e. Collect a sputum specimen.

RESPIRATORY SYSTEM
UNIT V

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

  A. Provide students with objective sheet.

  B. Provide students with information, assignment, and job sheets.

  C. Discuss unit and specific objectives.

  D. Discuss information and assignment sheets.

  E. Invite resource people to visit class.

  Examples: Laryngectomy Club, Lung Association

  F. Invite respiratory therapy personnel to speak to HOSA groups on career opportunities.

  G. Demonstrate safety by having fire department personnel give presentation on hazards and safety factors.

  H. Set up simulations in laboratory of safety hazards and have students evaluate.

  (NOTE: This will be good experience to practice for HOSA safety contest.)

  I. Provide materials and allow time to complete job sheets.

  J. Give test.

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

  C. Transparency masters

    1. TM 1--The Respiratory Tract

    2. TM 2--Nasal Cannula and Oxygen Mask

  D. Assignment sheets

    1. Assignment Sheet #1--Write Essay on Aspect of Respiratory System

    2. Assignment Sheet #2--Determine Safety Precautions to Take When Using Oxygen/O^2

E. Job sheets

1. Job Sheet #1--Prepare an Oxygen Cylinder for Use
2. Job Sheet #2--Prepare a Piped-In Oxygen Unit for Administration
3. Job Sheet #3--Use a Nasal Cannula
4. Job Sheet #4--Use an Oxygen Mask
5. Job Sheet #5--Collect a Sputum Specimen

F. Test

G. Answers to test

III. Unit references:

A. Memmler, Ruth L. and Rada, Ruth B. *The Human Body in Health and Disease*. Philadelphia, Pennsylvania: J. B. Lippincott Company, 1970.

B. Johnston, Dorothy F. *Total Patient Care Foundations and Practice*. St. Louis, Missouri: The C. V. Mosby Company, 1972.

C. Mitchel, Pamela H. *Concepts Basic to Nursing*. New York: McGraw-Hill Book Company, 1973.

D. Rogers, Helen. *Nursing I: A Course of Study*. Stillwater: Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1974.

E. Rogers, Helen. *Nursing II: A Course of Study*. Stillwater: Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1975.

F. Thompson, Ella M. and Rosdahl, Caroline. *Textbook of Basic Nursing*. Philadelphia, Pennsylvania: J. B. Lippincott Company, 1973.

IV. Additional materials:

A. Films:

1. "Point of View" (Smoking). Available from Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, Oklahoma 73105.
2. "Mechanism of Breathing." Available from Encyclopedia Brittanica Films, 425 N. Michigan Avenue, Chicago, Illinois 60611.

   3. "Inhalation Therapy." Oklahoma State Department of Health.

   4. "I Am Joe's Lung." Pyramid Films, 2801 Colorado Avenue, Santa Monica, California 90404.

B. Filmstrips--"Oxygen Administration." Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.

C. Pamphlets--"ABC's of Respiratory Therapy." Channing L. Bete Company, Incorporated, Greenfield, Massachusetts.

RESPIRATORY SYSTEM
UNIT V

INFORMATION SHEET

I. Terms and definitions

A. Respiration--Exchange of oxygen for carbon dioxide in the body

B. Inspiration--Drawing of air into lungs

(NOTE: Diaphragm and intercostal muscles contract, creating a vacuum, and air rushes in to inflate lungs.)

C. Expiration--Expulsion of air from lungs

(NOTE: When diaphragm and intercostal muscles relax, the lungs are compressed and the air flows out.)

D. Sinuses--Eight cavities in the skull connected with nasal cavities

E. Pharynx--Muscular passageway which transports food and liquids into the esophagus and air into lungs

F. Cilia--Hairlike processes projecting from epithelial cells

G. Adenoids--Masses of lymphoid tissue found in the nasopharynx

H. Tonsils--Masses of lymphoid tissue found in the oropharynx

I. Eustachian tubes--Passageways which connect middle ear to pharynx

J. Larynx--Voice box

K. Ventilation--Oxygen supplied to body through lungs

L. Hyperventilation--Abnormally rapid, deep breathing

M. Inhalation therapy--Program prevention and treatment of respiratory and circulatory dysfunctions

N. Intermittent positive pressure breathing--Providing oxygen and/or medication under increased pressure using special respirator

O. Nasal cannula--Disposable tube which has two protruding prongs for insertion into nostrils; used to administer oxygen (Transparency 2)

P. External respiration--Exchange of oxygen for carbon dioxide within alveoli of lungs

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INFORMATION SHEET

Q. Internal respiration--Exchange of oxygen for carbon dioxide within cells

R. Oxygen mask--Device that fits over nose and mouth to administer oxygen therapy (Transparency 2)

II. Fundamental purposes of breathing

A. Supplies oxygen to individual tissue cells

B. Removes carbon dioxide, the gaseous waste product

III. Structures of the respiratory system (Transparency 1)

A. Frontal sinus

B. Nasal cavity

C. Sphenoidal sinus

D. Nasopharynx

E. Oropharynx

F. Epiglottis

G. Laryngeal pharynx

H. Larynx and vocal folds

I. Trachea

J. Lungs

K. Bronchi

L. Diaphragm

M. Terminal bronchiole

N. Alveoli

IV. Functions of the nasal cavities

A. Removes dust particles and bacteria

B. Warms and moistens air before it reaches lungs

C. Provides sense of smell

INFORMATION SHEET

V. Structures of the pharynx

  A. Nasopharynx--Upper portion containing adenoids

  B. Oropharynx--Middle section behind mouth, containing tonsils and openings of eustachian tubes

  C. Laryngeal pharynx--Lower section with openings to larynx and esophagus

VI. Functions of pharyngeal and laryngeal structures

  A. Pharyngeal structures

    1. Pharynx serves as passageway for food, fluids, and air

    2. Adenoids and tonsils serve as filters for microorganisms and other foreign substances

    3. Eustachian tubes equalize pressure in middle ear

  B. Laryngeal structures

    1. Larynx

      a. Serves as passageway for air only

      b. Produces sound (voice)

    2. Epiglottis prevents food from entering larynx

VII. Functions of the bronchi, bronchial structures, and trachea

  A. Bronchi and bronchial structures

    1. Passageway of oxygen to alveoli

    2. Exchange of gases (oxygen and carbon dioxide)

  B. Trachea

    1. Conduction of air to and from lungs

    2. Transportation of inhaled foreign particles out of body by cilia

VIII. Structure of lungs

  A. Shaped like cones which nearly fill chest cavity

  (NOTE: Top of the lung is called the apex; the lower part is called the base.)

  B. Made of spongy tissue filled with alveoli, nerves, and blood and lymph vessels

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INFORMATION SHEET

C. Covered by smooth, double-layered sac, pleura, which provides moisture to prevent friction during movement

IX. Practical aspects of protecting the respiratory system

A. Maintain a beneficial environment

Examples: Maintain an optimum temperature; dress according to weather conditions; maintain proper humidity level; maintain proper filtering of air to remove dust and pollen; avoid drafts

B. Decrease smoking or stop entirely

C. Use aerosol sprays carefully

D. Use prescribed medicines properly

E. Exercise properly

F. Treat respiratory ailments promptly

X. Measures that increase respiratory efficiency

A. Changing and adjusting position frequently

B. Encouraging deep breathing exercises

C. Encouraging coughing

D. Using postural drainage

(NOTE: This involves promoting drainage of respiratory tract by means of placing patient in certain positions and a trained therapist using percussion.)

E. Encouraging early ambulation and/or exercise following illness, injury, or surgery

F. Using mechanically assisted respiratory therapy

XI. Principals of oxygen administration

A. Oxygen supports combustion; therefore, fire can be a hazard

B. Oxygen is essential for sustaining life

C. All oxygen administered therapeutically should be humidified by water, saline, or medicated solution before being administered to the respiratory system

INFORMATION SHEET

D. Flow of oxygen is measured in liters per minute

(NOTE: The physician usually will order the rate of flow desired.)

E. All patients and their families should be instructed in the use of the oxygen and the necessary safety precautions

XII. Safety factors to observe when using oxygen (Assignment Sheet #2)

A. Avoid open flames and sparks in oxygen area

B. Avoid using oil and grease to lubricate oxygen cylinders, valves, regulators, or other fittings

C. Use cotton fabrics in oxygen area

D. Do not use electrical devices in oxygen area

E. Post "No Smoking" and "Oxygen in Use" signs on door and at bedside

F. Do not use oil, alcohol, or powder in giving backrubs to patients

G. Check oxygen tank frequently to determine amount left for administration

(NOTE: Usually when tank is one-fourth full, cylinder should be replaced.)

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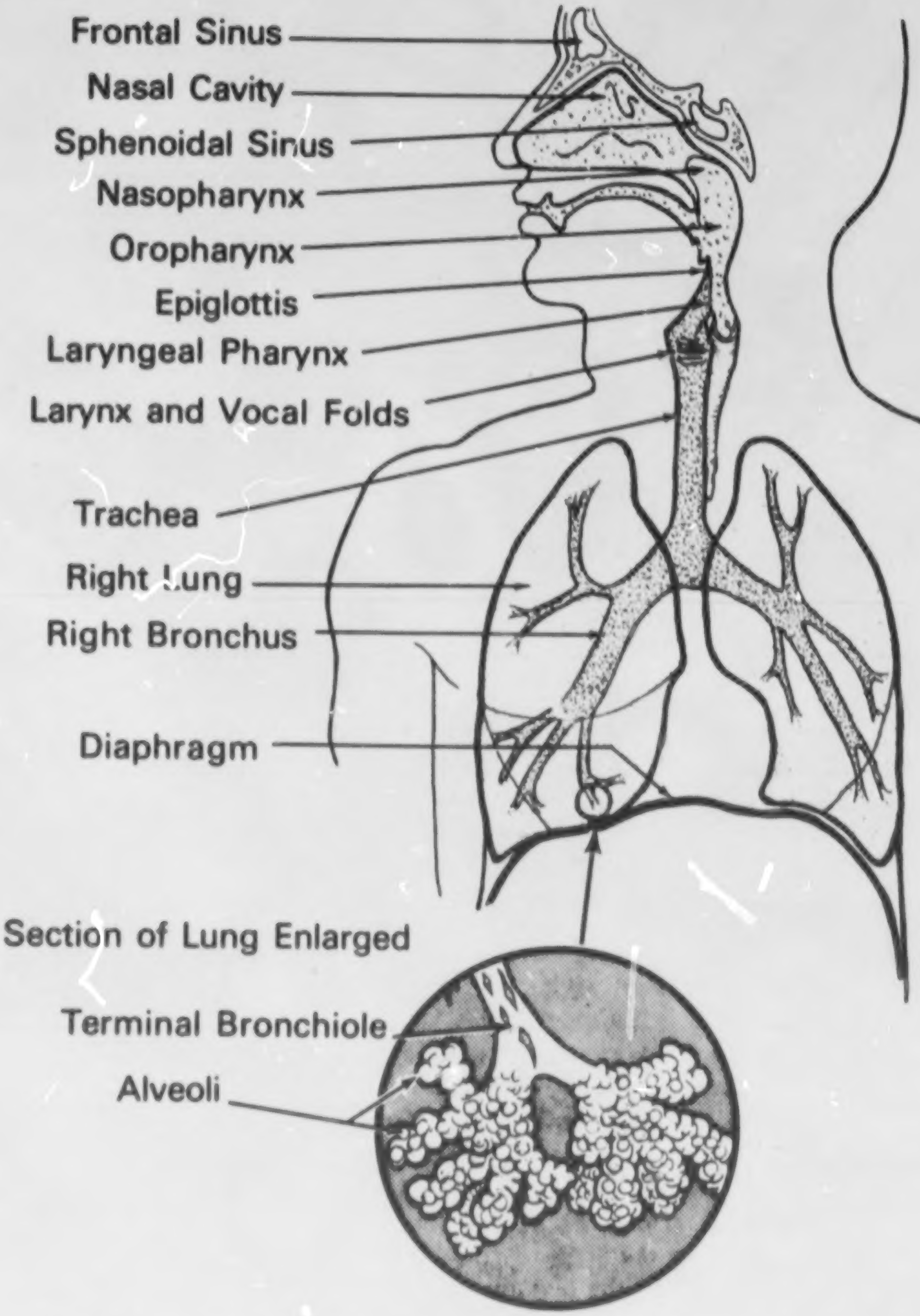
The Respiratory Tract



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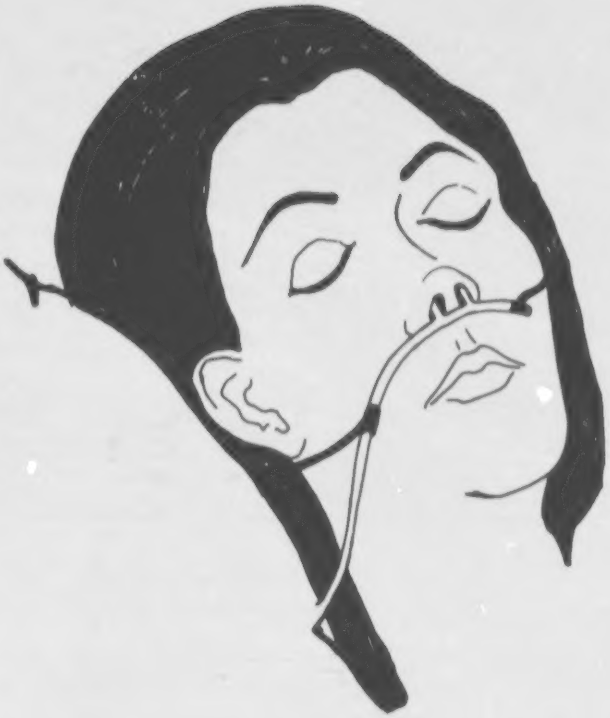
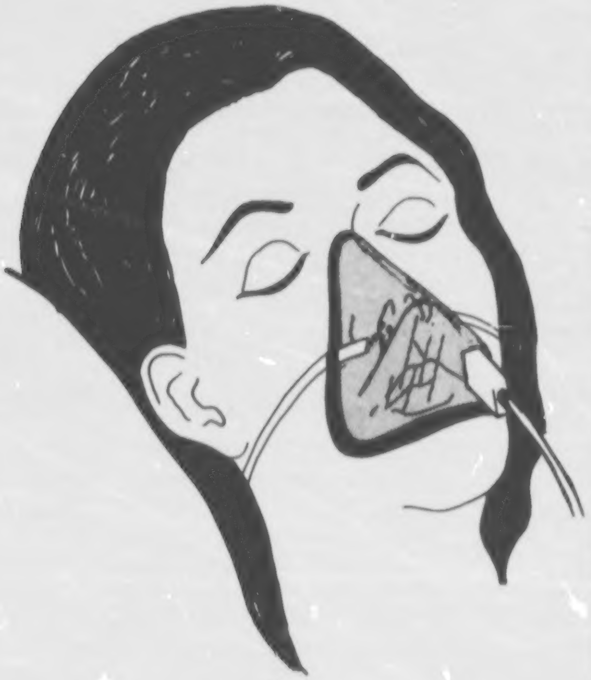
Nasal Cannula and Oxygen Mask



Cannula



Oxygen Mask

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RESPIRATORY SYSTEM
UNIT V

ASSIGNMENT SHEET #1--WRITE ESSAY ON ASPECT OF RESPIRATORY SYSTEM

(NOTE: This may be used for HOSA activity if applicable.)

Find an article concerning respiration in a current newspaper or magazine. Write a brief report about the article. Tell how your study of the respiratory system makes the article more relevant to you.

RESPIRATORY SYSTEM
UNIT V

ASSIGNMENT SHEET #2--DETERMINE SAFETY PRECAUTIONS TO TAKE WHEN USING OXYGEN/O^2

The use of oxygen/O^2 in respiratory and cardiac conditions is often necessary. Oxygen/O^2 must be handled with care and close monitoring of safety factors is very important.

Using knowledge gained from information given in the unit, describe safety precautions that should be taken with the following equipment and situations.

1. Portable oxygen tank

2. Piped in oxygen using the mask

3. Continuous use of oxygen used in a double room with two patients

4. Oxygen tent for a child

5. Patient using oxygen/O^2 prn with cannula

RESPIRATORY SYSTEM
UNIT V

JOB SHEET #1-PREPARE AN OXYGEN CYLINDER FOR USE

I. Equipment

   A. Cylinder of oxygen

   B. Regulator

   C. Wrench

   D. Humidifier

   E. Tubing

II. Procedure to prepare for use

   A. Assemble equipment

   B. Remove protective cap from cylinder

   C. Open cylinder valve slightly for a very short time (Figure 1)

   (NOTE: This is called "cracking" the valve. It blows out any dust particles which may have collected.)

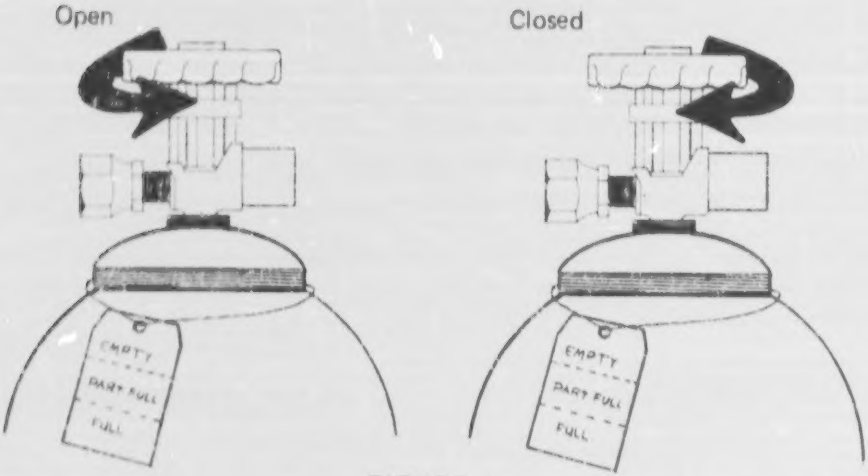


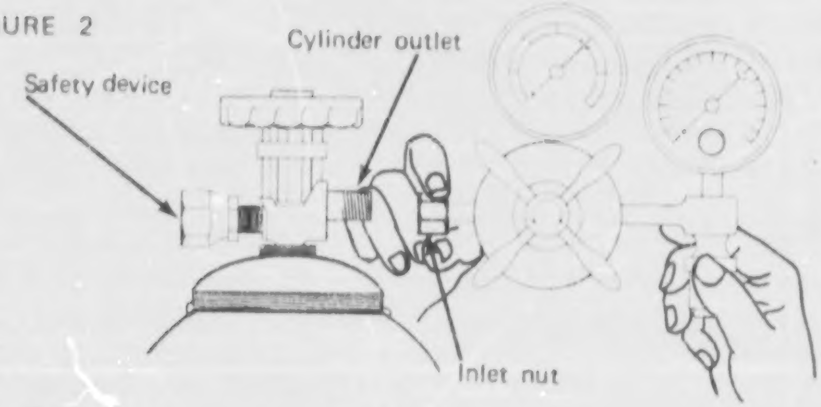
FIGURE 1

   D. Connect regulator to cylinder outlet on cylinder valve

   (NOTE: See Figure 2 on the following page.)

JOB SHEET #1

FIGURE 2



E. Tighten inlet nut with wrench (Figure 3)

(NOTE: Wrench is usually fastened to oxygen carrier with chain.)

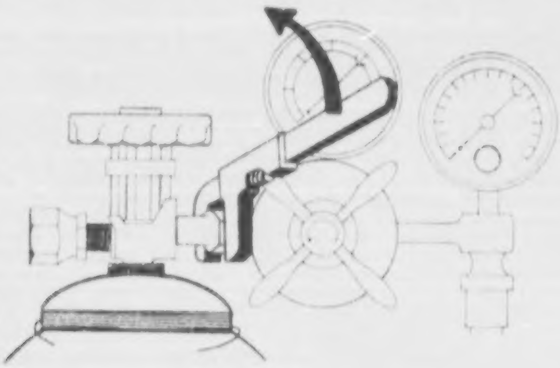
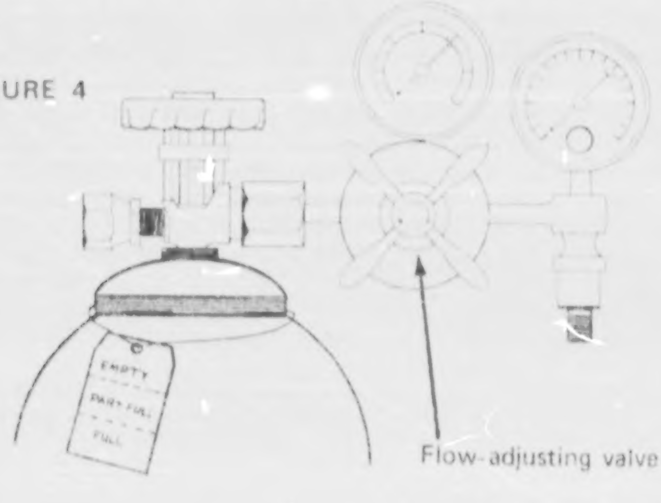


FIGURE 3

F. Turn flow-adjusting valve to "OFF" position (Figure 4)

FIGURE 4



JOB SHEET #1

G. Remove cover from humidifier

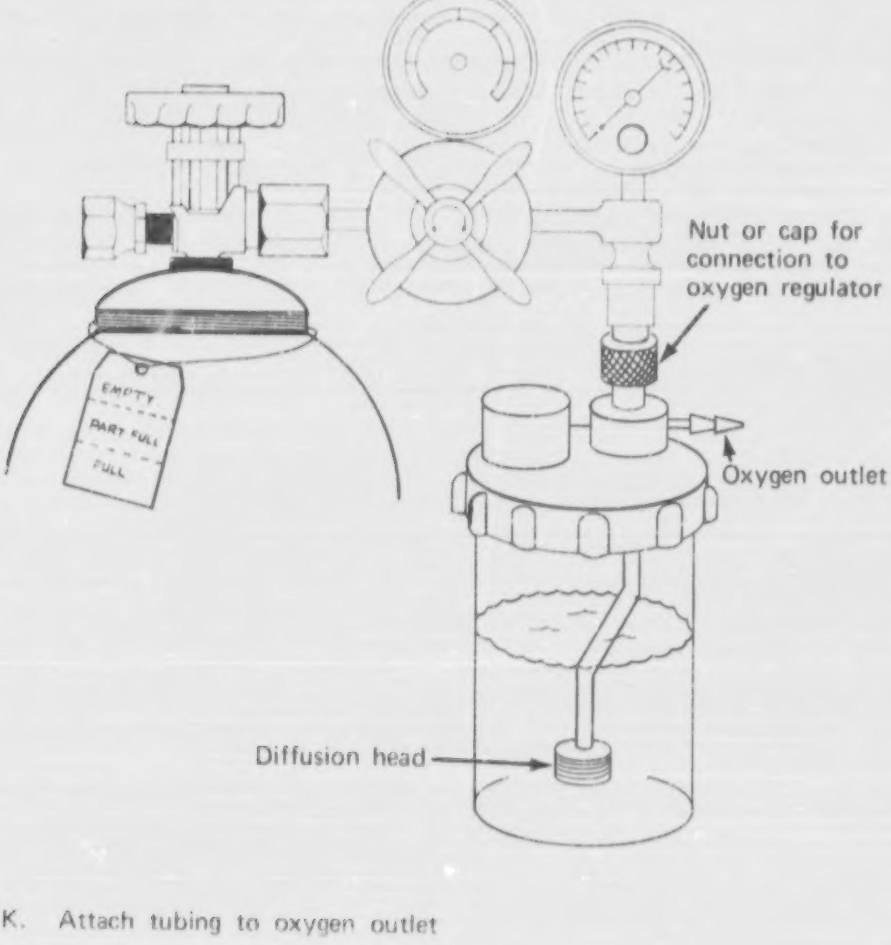
H. Fill humidifier with distilled water to indicated water level

(NOTE: If there is no water level mark, fill humidifier half full.)

I. Replace cover on humidifier

J. Attach humidifier to regulator (Figure 5)

FIGURE 5



K. Attach tubing to oxygen outlet

L. Open cylinder valve very slowly to avoid damaging regulator

(NOTE: See Figure 6 on the following page.)

JOB SHEET #1

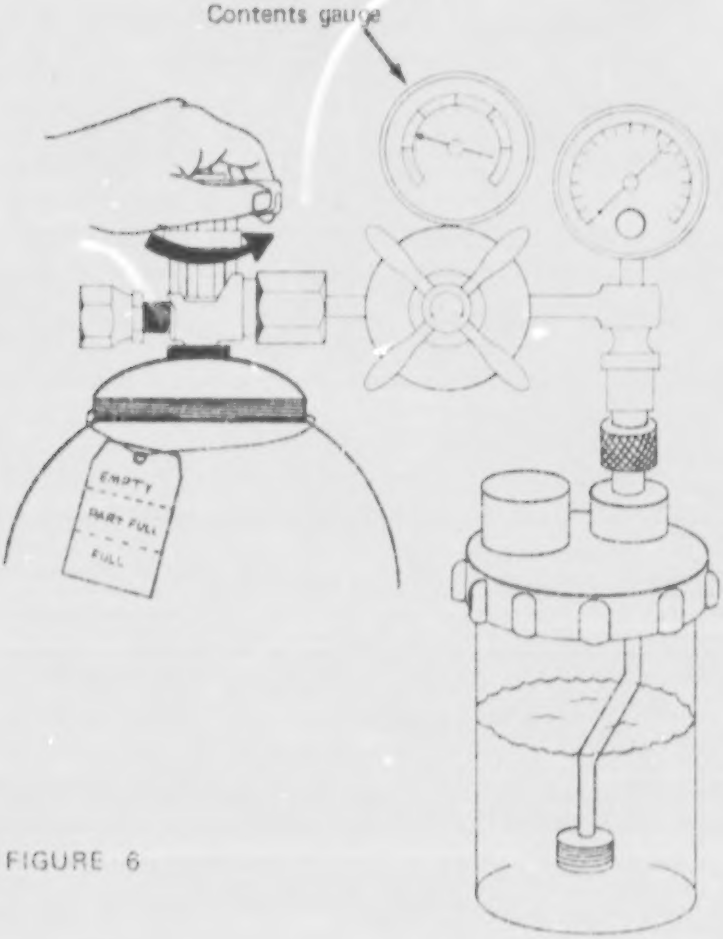


FIGURE 6

M. Turn flow-adjusting valve to "ON" position

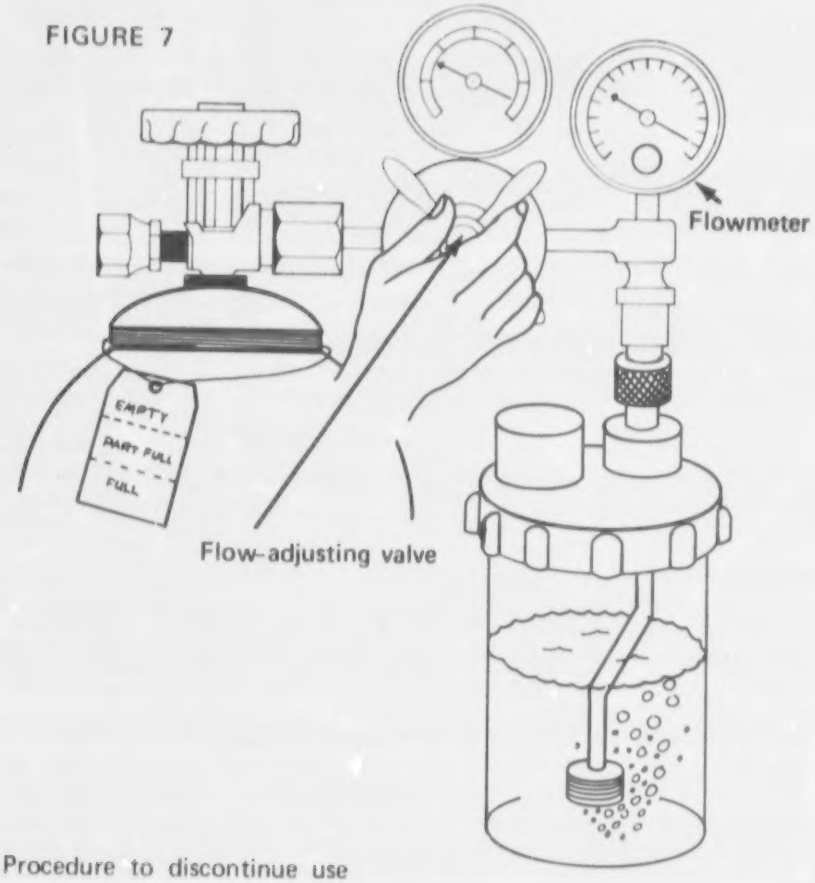
(NOTE: See Figure 7 on the following page.)

N. Continue turning flow-adjusting valve until flowmeter registers the prescribed number of liters per minute

(NOTE: Cylinder and regulator are now ready for use.)

JOB SHEET #1

FIGURE 7



III. Procedure to discontinue use

(NOTE: Follow this procedure when oxygen use is to be discontinued for thirty minutes or more and/or when the regulator is to be removed from the cylinder.)

A. Close cylinder valve tightly

B. Wait until flowmeter and cylinder contents gauge have returned to zero

C. Close flow-adjusting valve

D. Remove humidifier

E. Loosen inlet nut with wrench

F. Remove regulator

G. Replace protective cap

H. Clean equipment and return to proper place

RESPIRATORY SYSTEM
UNIT V

JOB SHEET #2--PREPARE A PIPED-IN OXYGEN UNIT FOR ADMINISTRATION

I. Equipment

- A. Flowmeter
- B. Humidifier
- C. Tubing

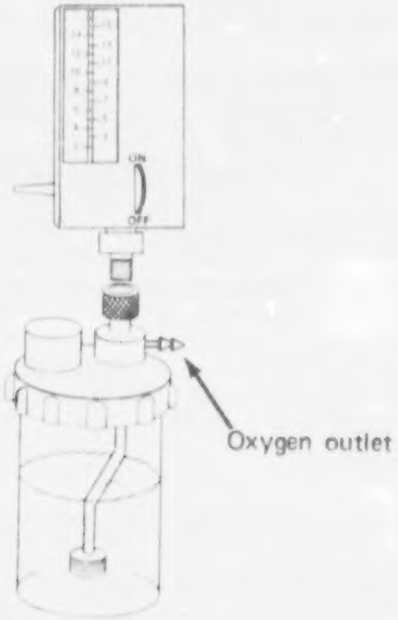
II. Procedure to prepare for use

- A. Assemble equipment
- B. Remove cover on humidifier
- C. Fill humidifier with distilled water to prescribed level

  (NOTE: If there is no water-level mark, fill humidifier half full.)

- D. Replace cover on humidifier
- E. Attach humidifier to flowmeter (Figure 1)

FIGURE 1



- F. Take equipment to patient's unit

JOB SHEET #2

G. Turn flow-adjusting valve to "OFF" position (Figure 2)

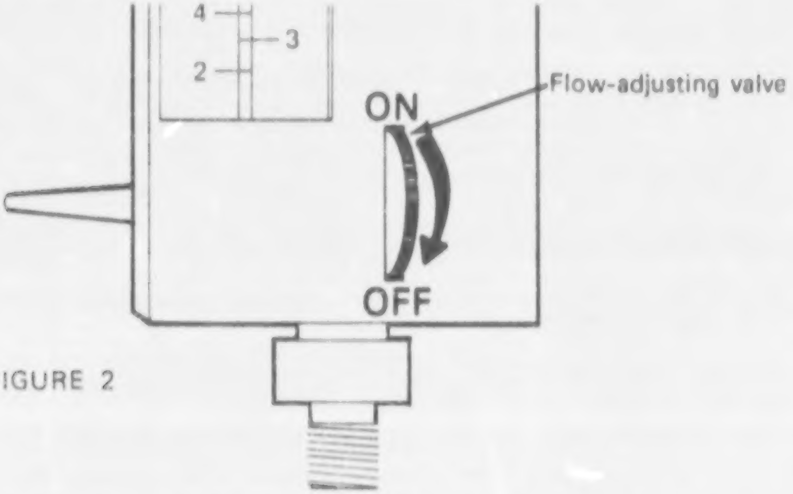


FIGURE 2

H. Insert flowmeter adapter into opening of outlet, pressing firmly to secure until it snaps into place (Figure 3)

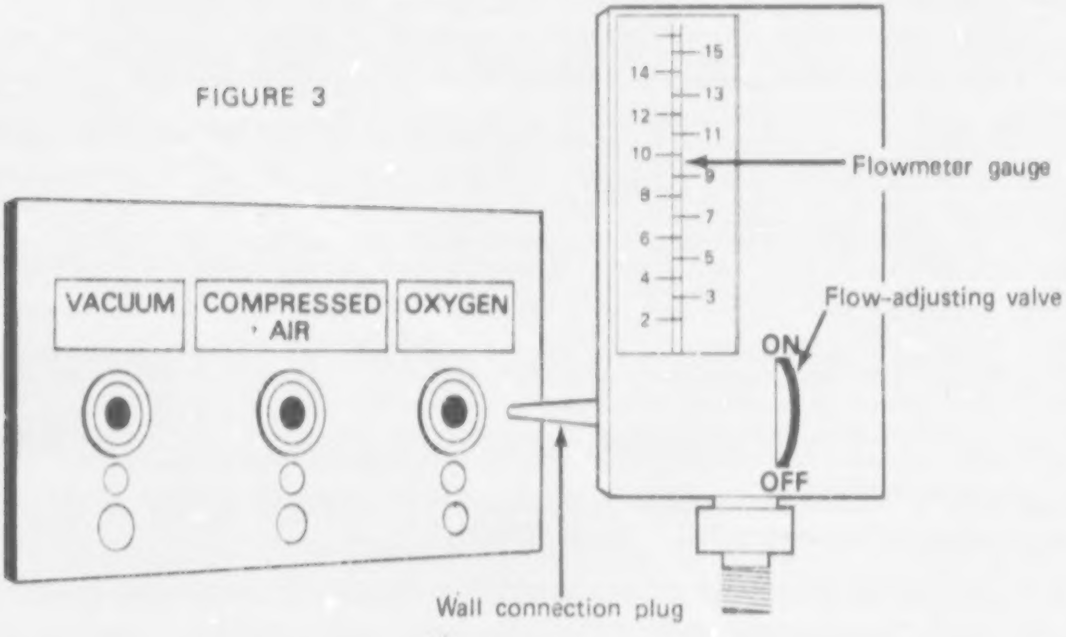


FIGURE 3

JOB SHEET #2

I. Attach tubing to oxygen outlet (Figure 4)

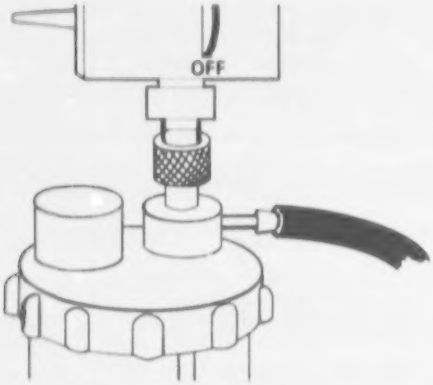


FIGURE 4

J. Slowly open flow-adjusting valve until desired flow is obtained

(NOTE: Oxygen is now ready for use.)

III. Procedure to discontinue use

A. Turn flow-adjusting valve to "OFF"

B. Wait until gauge drops to zero

C. Remove flowmeter from outlet by releasing locking mechanism

D. Clean equipment and return to proper place

RESPIRATORY SYSTEM
UNIT V

JOB SHEET #3--USE A NASAL CANNULA

I. Equipment

   A. Oxygen setup

      (NOTE: Prepare oxygen setup using instructions on Job Sheet #1 or #2.)

   B. Nasal cannula

II. Procedure

   A. Check physician's order for details

   B. Wash hands

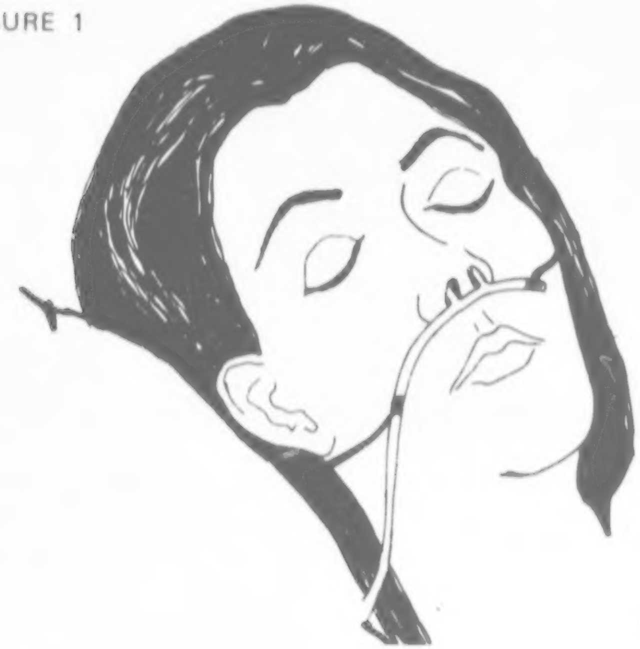
   C. Assemble equipment and take to patient's unit

   D. Identify patient and explain procedure

   E. Start flow of oxygen at about three liters

   F. Apply nasal cannula and adjust for patient's comfort (Figure 1)

FIGURE 1



Nasal Cannula

JOB SHEET #3

G. Adjust rate of flow to prescribed number of liters per minute

H. Check frequently for

  1. Cannula position
  2. Rate of oxygen flow
  3. Water level in humidifier
  4. Patency of tubing
  5. Leaks in connections
  6. Quantity of oxygen remaining in cylinders

I. Remove and clean cannula at least once every eight hours

J. Record and report

  1. Time
  2. Rate of flow
  3. Patient response

K. Discontinue use

  1. Remove nasal cannula
  2. Shut off oxygen supply
  3. Clean and return equipment to proper place

L. Record time oxygen is discontinued

RESPIRATORY SYSTEM
UNIT V

JOB SHEET #4--USE AN OXYGEN MASK

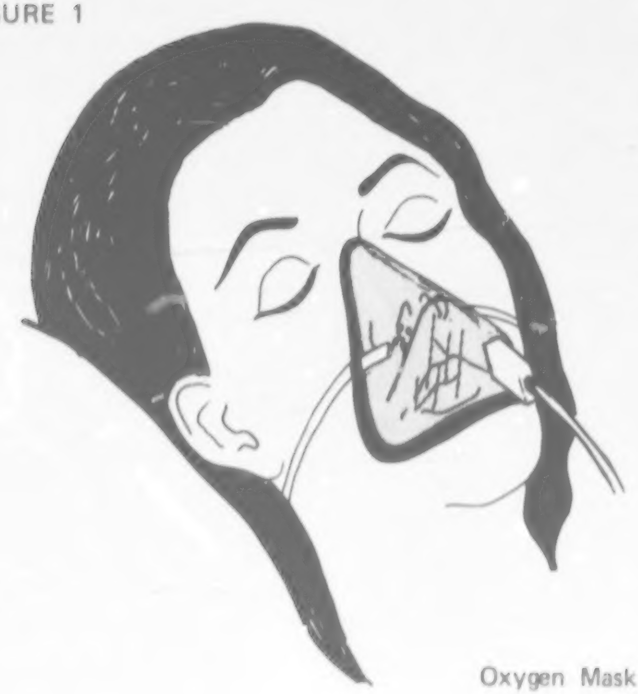
I. Equipment

A. Oxygen setup

(NOTE: Prepare oxygen setup using instructions on Job Sheet #1 or #2.)

B. Face mask (Figure 1)

FIGURE 1



Oxygen Mask

II. Procedure

A. Check physician's order

B. Wash hands

Assemble equipment and take to patient's unit

JOB SHEET #4

D. Identify patient and explain procedure

E. Attach tubing from face mask to oxygen outlet

F. Start oxygen flow at a high rate, fourteen to fifteen liters per minute

(NOTE: Most patients breathe more deeply and rapidly when mask is first applied. If the oxygen flow is initially too low, the patient may not be getting enough oxygen.)

G. Adjust face mask

H. Secure straps so mask fits snugly, but not tightly enough to hamper circulation

I. Check for oxygen leaking around edges of the mask; if necessary, place a piece of dampened gauze or cotton in leaking areas

J. Readjust rate of flow to prescribed level

K. Remove mask every two hours to sponge and dry patient's face

L. Check frequently for

1. Position of face mask
2. Rate of flow of oxygen
3. Water level in humidifier
4. Patency of tubing
5. Leaks in connections
6. Quantity of oxygen remaining in cylinders

M. Record and report

1. Time
2. Rate of flow
3. Patient response

N. Clean equipment and replace as necessary

(NOTE: Because there are many types of oxygen masks, it is the responsibility of each health care worker to learn about those used in your health care facility.)

JOB SHEET #4

O. Discontinue use

    1. Remove mask

    2. Shut off oxygen supply

    3. Clean equipment and return to proper place

P. Record time oxygen is discontinued

RESPIRATORY SYSTEM
UNIT V

JOB SHEET #5--COLLECT A SPUTUM SPECIMEN

I. Equipment

  A. Sputum container with cover

  B. Label

  C. Laboratory requisition

II. Procedure

  A. Check physician's orders

  B. Fill out label on container and requisition

  C. Wash hands

  D. Identify patient and explain procedure

  (NOTE: Explain that sputum is mucus coughed up from the lungs, and not saliva in the mouth. Also, explain the importance of keeping the mouth clean after eating to avoid contamination of the specimen with particles of food.)

  E. Place sputum container with cover at bedside

  F. Leave container at bedside until sufficient sputum is collected, or for a twenty-four hour period, whichever is specified in physician's orders

  G. Seal container with cover at specified time

  H. Wash and dry outside of container

  I. Wash hands

  J. Take or send specimen to laboratory

  K. Report and record the procedure

  (NOTE: Follow manufacturer's instructions for use of containers.)

RESPIRATORY SYSTEM
UNIT V

TEST

NAME ______________________________ SCORE ________________

1. Match the terms associated with the respiratory system with their correct definitions. Place the appropriate numbers in the blanks provided.

______a. Voice box

______b. Eight cavities in the skull connected with nasal cavities

______c. Exchange of oxygen for carbon dioxide in the body

______d. Exchange of oxygen for carbon dioxide within alveoli of lungs

______e. Abnormally rapid, deep breathing

______f. Hairlike processes projecting from epithelial cells

______g. Drawing of air into lungs

______h. Oxygen supplied to body through lungs

______i. Masses of lymphoid tissue found in the nasopharynx

______j. Expulsion of air from lungs

______k. Muscular passageway which transports food and liquids into esophagus and air into lungs

______l. Masses of lymphoid tissue found in oropharynx

______m. Program prevention and treatment of respiratory and circulatory dysfunctions

______n. Passageways which connect middle ear to pharynx

______o. Exchange of oxygen for carbon dioxide within cells

1. Respiration
2. Inspiration
3. Expiration
4. Sinuses
5. Pharynx
6. Cilia
7. Adenoids
8. Tonsils
9. Eustachian tubes
10. Larynx
11. Ventilation
12. Hyperventilation
13. Inhalation therapy
14. Intermittent positive pressure breathing
15. Nasal cannula
16. External respiration
17. Internal respiration
18. Oxygen mask

______ p. Disposable tube which has two protruding prongs for insertion into nostrils; used to administer oxygen

______ q. Providing oxygen and/or medication under increased pressure using special respirator

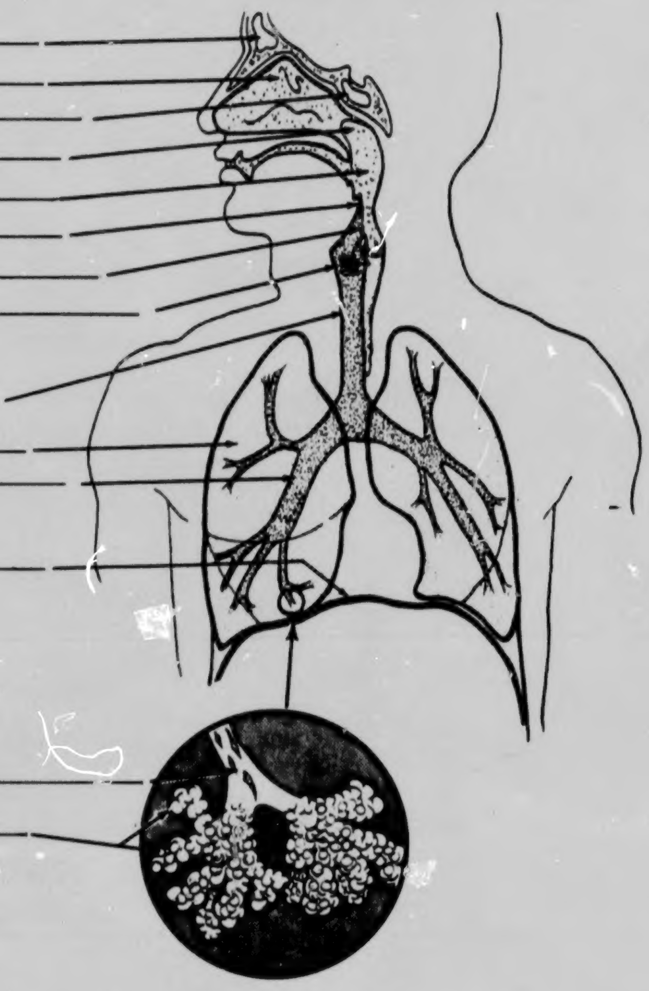
______ r. Device that fits over nose and mouth to administer oxygen therapy

2. Name the fundamental purposes of breathing.

a. ______________________________

b. ______________________________

3. Identify structures of the respiratory system shown in the diagram below.



a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

h. ______________________________

i. ______________________________

j. ______________________________

k. ______________________________

l. ______________________________

m. ______________________________

n. ______________________________

4. Select from the list below functions of the nasal cavities by placing an "X" in the appropriate blanks.

_____a. Warm and moisten air before it reaches lungs

_____b. Begin digestive process

_____c. Provide sense of smell

_____d. Remove dust particles and bacteria

_____e. Contain salivary glands

5. Match structures of the pharynx with their correct descriptions.

_____a. Lower section with openings to larynx and esophagus

_____b. Middle section behind mouth, containing tonsils and openings of eustachian tubes

_____c. Upper portion containing adenoids

1. Nasopharynx
2. Oropharynx
3. Laryngeal pharynx

6. Classify below the functions of pharyngeal and laryngeal structures. Place a "P" for functions of pharyngeal structures and an "L" for functions of laryngeal structures in the appropriate blanks.

_____a. Eustachian tubes equalize pressure in middle ear

_____b. Larynx produces sound (voice)

_____c. Epiglottis prevents food from entering larynx

_____d. Pharynx serves as passageway for food, fluids, and air

_____e. Larynx serves as passageway for air only

_____f. Adenoids and tonsils serve as filters for microorganisms and other foreign substances

7. Classify below the functions of bronchi, bronchial structures, and trachea. Place a "B" for functions of bronchi and bronchial structures and a "T" for the functions of the trachea in the appropriate blanks.

_____a. Exchange of gases (oxygen and carbon dioxide)

_____b. Conduction of air to and from lungs

_____c. Transportation of inhaled foreign particles out of body by cilia

_____d. Passageway of oxygen to alveoli

8. Describe the structure of the lungs.

____

____

____

9. Name four practical aspects of protecting the respiratory system.

a. ____

b. ____

c. ____

d. ____

10. Select from the list below measures that increase respiratory efficiency by placing an "X" in the appropriate blanks.

_____a. Encouraging coughing

_____b. Encouraging early ambulation and/or exercise following illness, injury, or surgery

_____c. Encouraging deep breathing exercises

_____d. Encouraging patient to assume prone position

_____e. Providing diversional activities

_____f. Changing and adjusting position frequently

_____g. Using postural drainage

_____h. Pressing on diaphragm

_____i. Using mechanically assisted respiratory therapy

11. Name the principles of oxygen administration.

a. ____

b. ____

c. ____

d. ____

e. ____

12. Select from the list below safety factors to observe when using oxygen by placing an "X" in the appropriate blanks.

    _____a. Use oil and grease to lubricate oxygen cylinders, valves, regulators, or other fittings

    _____b. Check the oxygen tank frequently to determine the amount left for administration

    _____c. Avoid open flames and sparks in oxygen area

    _____d. Use polyester and nylon fabrics in oxygen area

    _____e. Use electrical devices in oxygen area

    _____f. Post "No Smoking" and "Oxygen in Use" signs on door and at bedside

    _____g. Use alcohol in giving backrubs to patients

13. Write essay on aspect of respiratory system.

14. Demonstrate the ability to:

    a. Prepare an oxygen cylinder for use.

    b. Prepare a piped-in oxygen unit for administration.

    c. Use a nasal cannula.

    d. Use an oxygen mask.

    e. Collect a sputum specimen.

    (NOTE: If the above activities have not been accomplished prior to the test, ask your instructor when they should be completed.)

RESPIRATORY SYSTEM
UNIT V

ANSWERS TO TEST

1.
   - a. 10
   - b. 4
   - c. 1
   - d. 16
   - e. 12
   - f. 6
   - g. 2
   - h. 11
   - i. 7
   - j. 3
   - k. 5
   - l. 8
   - m. 13
   - n. 9
   - o. 17
   - p. 15
   - q. 14
   - r. 18

2.
   - a. Supplies oxygen to individual tissue cells
   - b. Removes carbon dioxide, gaseous waste product

3.
   - a. Frontal sinus
   - b. Nasal cavity
   - c. Sphenoidal sinus
   - d. Nasopharynx
   - e. Oropharynx
   - f. Epiglottis
   - g. Laryngeal pharynx
   - h. Larynx and vocal folds
   - i. Trachea
   - j. Right lung
   - k. Right bronchus
   - l. Diaphragm
   - m. Terminal bronchiole
   - n. Alveoli

4. a, c, d

5.
   - a. 3
   - b. 2
   - c. 1

6.
   - a. P
   - b. L
   - c. L
   - d. P
   - e. L
   - f. P

7. a. B
   b. T
   c. T
   d. B

8. Description should include:
   a. Shaped like cones which nearly fill the chest cavity
   b. Made of spongy tissue filled with alveoli, nerves, and blood and lymph vessels
   c. Covered by smooth, double-layered sac, pleura, which provides moisture to prevent friction during movement

9. Any four of the following:
   a. Maintain a beneficial environment
   b. Decrease smoking or stop entirely
   c. Use aerosol sprays carefully
   d. Use prescribed medicines properly
   e. Exercise properly
   f. Treat respiratory ailments promptly

10. a, b, c, f, g, i

11. a. Oxygen supports combustion; therefore, fire can be a hazard
    b. Oxygen is essential for sustaining life
    c. All oxygen administered therapeutically should be humidified by water, saline, or medicated solution before being administered to the respiratory system
    d. Flow of oxygen is measured in liters per minute
    e. All patients and their families should be instructed in the use of oxygen and the necessary safety precautions

12. b, c, f

13. Evaluated to satisfaction of instructor

14. Performance skills evaluated to satisfaction of instructor

MUSCULOSKELETAL SYSTEM
UNIT VI

UNIT OBJECTIVE

After completion of this unit, the student should be able to distinguish between the major functions of the muscular and skeletal system. The student should also be able to distinguish ways to maintain the muscular and skeletal systems. The student should also be able to demonstrate the ability to give active and passive range-of-motion exercises. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with the muscular system to their correct definitions.
2. Match terms associated with the skeletal system to their correct definitions.
3. Distinguish between functions of muscles and bones.
4. Match terms associated with characteristics of muscle tissue to their correct definitions.
5. Match types of muscles to their correct actions.
6. Identify principal muscles on a given diagram.
7. Distinguish between ways to maintain muscular and skeletal systems.
8. Select from a list components of bones.
9. Classify types of bones.
10. Distinguish between divisions of axial and appendicular skeletons.
11. Classify types of joints according to the type of movement.
12. Identify bones on specific diagrams.
13. Discuss care of patients in traction.
14. Name types of casts.
15. Discuss care of patients in casts.
16. Demonstrate the ability to:
    a. Give active range-of-motion exercises.
    b. Give passive range-of-motion exercises.

MUSCULOSKELETAL SYSTEM
UNIT VI

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

- A. Provide students with objective sheet.
- B. Provide students with information and job sheets.
- C. Make transparencies.
- D. Discuss unit and specific objectives.
- E. Discuss information and job sheets.
- F. Invite a physical or orthopedic therapist to visit or take a field trip to a physical or orthopedic therapy department.
- G. Provide materials for job sheets and demonstrate job skills.
- H. Give test.

II. Instructional materials:

- A. Objective sheet
- B. Information sheet
- C. Transparency masters
  1. TM 1--Muscles: Anterior View
  2. TM 2--Muscles: Posterior View
  3. TM 3--Anterior View of the Skeleton
  4. TM 4--Posterior View of the Skeleton
- D. Job sheets
  1. Job Sheet #1--Give Active Range-of-Motion Exercises
  2. Job Sheet #2--Give Passive Range-of-Motion Exercises
- E. Test
- F. Answers to test

III. Unit references:

A. Culver, Vivian M. *Modern Bedside Nursing.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1969.

B. Dienhart, Charlotte M. *Basic Human Anatomy and Physiology.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1967.

C. Memmler, Ruth L. and Rada, Ruth B. *The Human Body in Health and Disease.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1970.

D. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1974.

E. Rogers, Helen. *Nursing III: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1976.

F. Thomas, Virginia E. *Life Sciences for Health Technologies.* Los Angeles, California: Technicourse Inc., 1970.

IV. Filmstrips:

1. "The Musculoskeletal System." Robert J. Brady Company, A Prentice-Hall Company, Bowie, Maryland 20715.
2. "Care of Patient in a Cast." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.
3. "Care of Patient in Traction." Trainex Corporation.

MUSCULOSKELETAL SYSTEM
UNIT VI

INFORMATION SHEET

I. Terms and definitions associated with the muscular system

   A. Myology--Study of muscles

   B. Skeletal muscles--Bundles of striated muscle tissue surrounded by connective tissue

   C. Tendon--Narrow strip of dense connective tissue that attaches muscle to a bone

   D. Tonus--Slight tension in the muscle which is always present even when muscle is resting

   (NOTE: Continued active use of muscle causes it to increase in tone and size.)

   E. Flaccid--Lacking muscle tone

   F. Muscle fatigue--Loss of muscle's power to contract after prolonged periods of muscle contraction

   G. Atrophy--Wasting away

   H. Prime mover--Muscle primarily responsible for a specific action

   I. Antagonist--Muscle which counteracts with a prime mover

   J. Intramuscular--Within a muscle

II. Terms and definitions associated with the skeletal system

   A. Foramen--Hole or opening for passage of blood vessels, nerves, and ligaments

   B. Head--Rounded portion beyond narrow, neck-like portion of a long bone

   C. Sinus--Chamber or cavity in a bone

   D. Appendage--Anything attached to a larger part; a dependent part

   Examples: Arm, leg, tail

   E. Appendicular--Pertaining to a limb or appendage

   F. Axial--Pertaining to the central part; skeleton of head and trunk

   G. Osteology--Study of bones

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INFORMATION SHEET

H. Arthrology--Study of joints

I. Articulation--Point where bones are joined together; a joint

J. Cartilage--White elastic substance attached to bone surfaces at the joints

K. Ligament--Tough, fibrous band binding together bones or supporting internal organs

L. Skeletal traction--Traction applied using wires, pins, or tongs through the bones

Examples: Kirshner wire, Crutchfield tongs

M. Skin traction--Traction applied to skin using adhesive strips held in place by elastic bandages or special type of heavy cloth belt

Examples: Buck's extension, Russell's traction, pelvic traction

III. Major functions of muscles and bones

A. Muscles

1. Allow movement

(NOTE: This involves any movement, including moving from place to place, movement of the pupil of the eye, and internal movement, such as blood pushing through the vessels.)

2. Result in heat and energy due to a chemical reaction within the muscle tissue

3. Dictate posture and body mechanics

4. Protect internal organs

B. Bones

1. Provide shape and support

2. Assist in body movement

3. Protect vital organs

4. Manufacture red blood cells, platelets, and some white cells

5. Store minerals such as calcium and phosphorus

INFORMATION SHEET

IV. Terms and definitions associated with characteristics of muscle tissue

- A. Contractility--Ability of a muscle to shorten and thicken when given proper stimulus
- B. Elasticity--Ability of a muscle to return to its original length after stretching
- C. Extensibility--Ability of a muscle to stretch
- D. Irritability--Ability of a muscle to respond to stimulation

V. Types of muscles and their actions

- A. Abductors--Move away from a part
- B. Adductors--Move toward a part or to the midline
- C. Levators--Lift a part
- D. Depressors--Lower a part
- E. Flexors--Bend a joint
- F. Extensors--Straighten a joint
- G. Rotators--Revolve a part on its axis
- H. Sphincters--Ring-like muscles that close body openings

VI. Principal skeletal muscles and their location (Transparencies 1 and 2)

- A. Sternocleidomastoid--Neck
- B. Deltoid--Shoulder
- C. Biceps brachii--Upper arm
- D. Triceps brachii--Upper arm
- E. Trapezius--Back
- F. Latissimus dorsi--Back
- G. Pectoralis major--Chest
- H. External and internal oblique--Abdominal wall
- I. Rectus abdominis--Abdominal wall
- J. Gluteus maximus--Buttocks

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INFORMATION SHEET

K. Gluteus medius--Buttocks

L. Quadriceps femoris--Thigh

M. Biceps femoris--Thigh

N. Tibialis anterior--Lower leg

O. Gastrocnemius--Lower leg

P. Vastus lateralis--Lateral thigh

Q. Orbicularis oculi--Around eye

R. Orbicularis oris--Around mouth

S. Achilles tendon--Back of heel

T. Aponeurosis--Small of back

U. Olecranon process--Elbow

V. Intercostals--Breathing muscles

W. Quadriceps femoris--Anterior thigh

    1. Vastus lateralis
    2. Vastus intermedius
    3. Vastus medialis

VII. Maintaining muscular and skeletal systems

A. Muscular

    1. Exercise regularly and sensibly
    2. Avoid excessive load which may cause strain
    3. Learn to relax voluntary muscles at will
    4. Rest sufficiently to relieve muscle fatigue
    5. Use proper body mechanics at all times
    6. Maintain an adequate diet
    7. Maintain adequate oxygen supply

INFORMATION SHEET

B. Skeletal

1. Maintain good posture
2. Give special attention to foot care
3. Maintain adequate diet for growth and maintenance, including Vitamin D, calcium, iron, phosphorus, and protein
4. Use proper body mechanics at all times
5. Exercise regularly

VIII. Components of bones

A. Inorganic salts

Example: Calcium phosphate

B. Organic materials

Examples: Bone cells, blood vessels, nerves, and cartilage

C. Water

IX. Types of bones

A. Long (length is greater than breadth)

1. Humerus
2. Radius
3. Ulna
4. Femur
5. Tibia
6. Fibula

B. Short (length and breadth nearly equal)

1. Wrist
2. Ankle

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INFORMATION SHEET

C. Flat (two layers of compact bone separated by a narrow space)

1. Skull
2. Sternum
3. Ribs
4. Shoulder blade

D. Irregular

(NOTE: These are shapes that do not fit into the first three groups.)

1. Face
2. Spinal
3. Hip

E. Sesamoid--Patella

X. Divisions of the skeleton

A. Axial skeleton (bony framework of head and trunk)

(NOTE: Axial skeleton includes eighty bones.)

1. Skull
2. Vertebrae
3. Ribs and sternum

B. Appendicular skeleton (framework of extremities)

(NOTE: Appendicular skeleton includes 126 bones.)

1. Upper extremities
2. Lower extremities

XI. Types of joints

A. Immovable with no joint cavities--Cranium

(NOTE: Bony areas of the skull are connected by a thin layer of fibrous connective tissue, a joint called a suture.)

B. Slightly movable

1. Vertebral discs
2. Symphysis pubis

INFORMATION SHEET

3. Sacroiliac joints

C. Freely movable synovial joints

(NOTE: These are joints that contain a membrane that secretes a viscid white fluid, synovial fluid, which provides lubrication for movement.)

1. Shoulder joints
2. Elbow, wrist, and finger joints
3. Knee and ankle joints

XII. Bones of the skeletal system (Transparencies 3 and 4)

A. Axial skeleton

1. Cranium
2. Cervical vertebrae
3. Thoracic vertebrae
4. Lumbar vertebrae
5. Sacrum
6. Coccyx
7. Sternum
8. Xiphoid process
9. Ribs

B. Appendicular skeleton (upper extremities)

1. Clavicle
2. Scapula
3. Humerus
4. Ulna
5. Radius
6. Carpals
7. Metacarpals
8. Phalanges

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INFORMATION SHEET

C. Appendicular skeleton (lower extremities)

1. Ilium
2. Ischium
3. Pubis
4. Femur
5. Patella
6. Tibia
7. Fibula
8. Tarsals
9. Metatarsals
10. Phalanges
11. Calcaneus

XIII. Care of patients in traction

A. Maintain body alignment as prescribed

B. Do not remove weights without an order

(NOTE: Traction is often ordered as intermittent or constant type of treatment.)

C. Be sure pulley ropes are in proper alignment and weights hang free

(NOTE: Bed will usually be adjusted so that weights do not touch floor or hit end of bed.)

D. Keep siderails up

E. Use fracture pan if patient is on bedrest

F. Avoid covering any parts of traction apparatus

G. Avoid bumping or jarring bed or traction apparatus

H. Give proper skin care

I. Make sure to have assistance to turn patient, if permissable, in a smooth procedure

INFORMATION SHEET

XIV. Types of casts

A. Arm

Examples: Short, long, hanging

B. Leg

Examples: Short, boot, long

C. Body

Examples: Full, shoulder spica, hip spica

XV. Care of patients in casts

A. Handle cast carefully if still wet to avoid any indentations that might cause pressure points; use palms of hands to hold cast

B. Inspect cast and injured area frequently to check for pressure areas, swelling, inflamed areas, soiled areas, and peculiar odors under cast

C. Change position frequently, if permissable

D. Give good skin care

E. Keep bed linens smooth

F. Support cast with pillows, sandbags, or sling as indicated to relieve pressure on body

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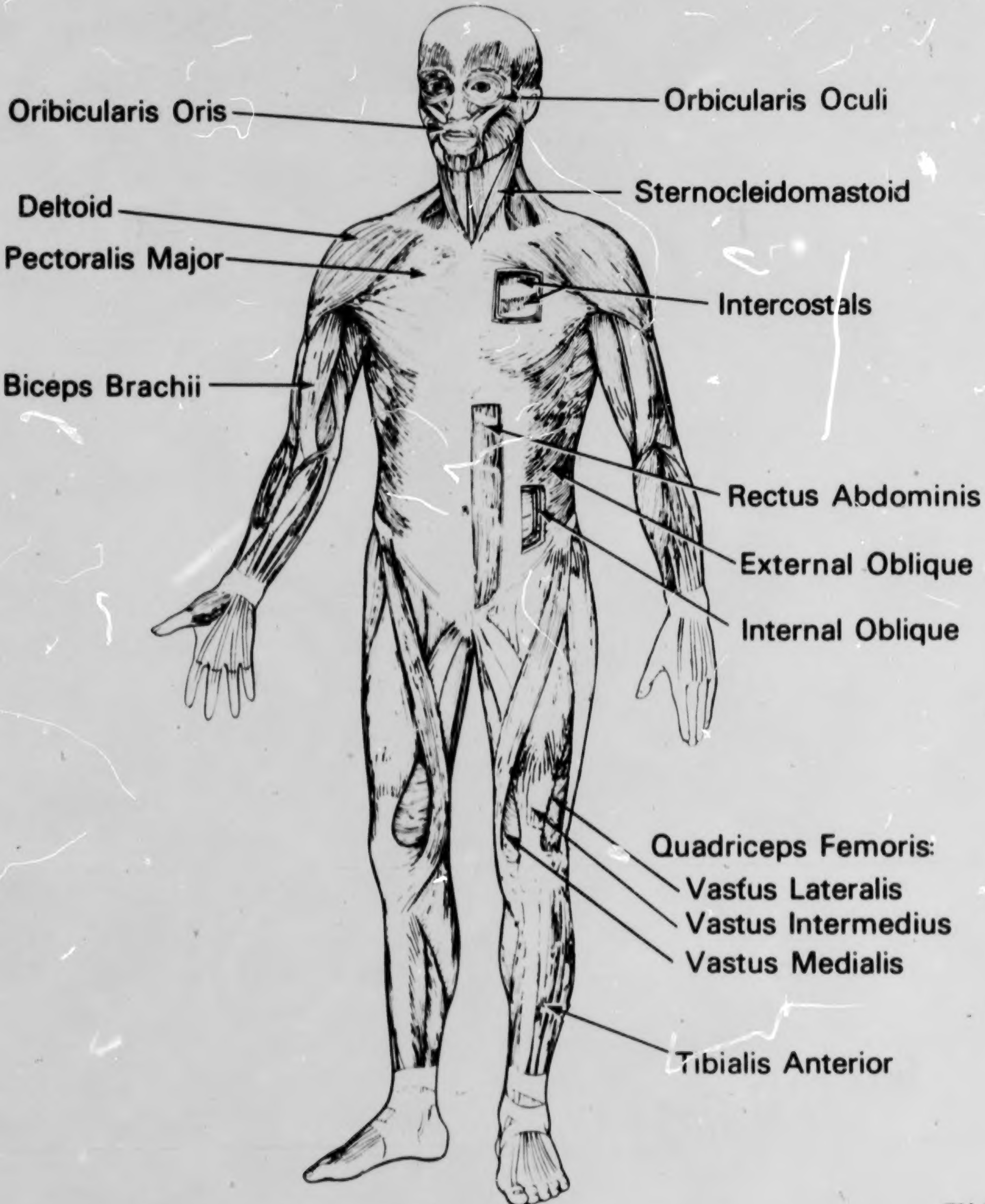
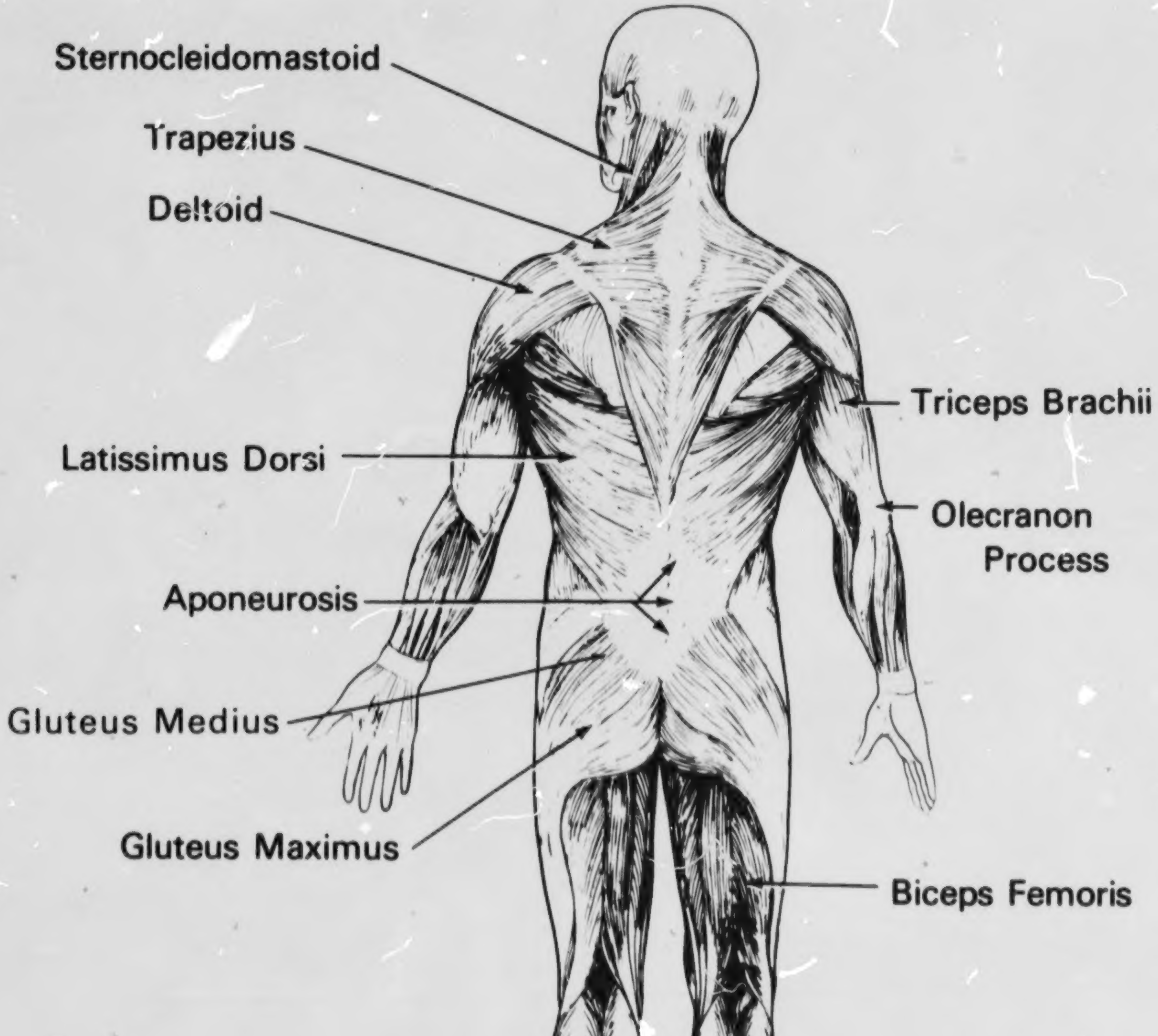
Muscles: Anterior View



Muscles: Posterior View



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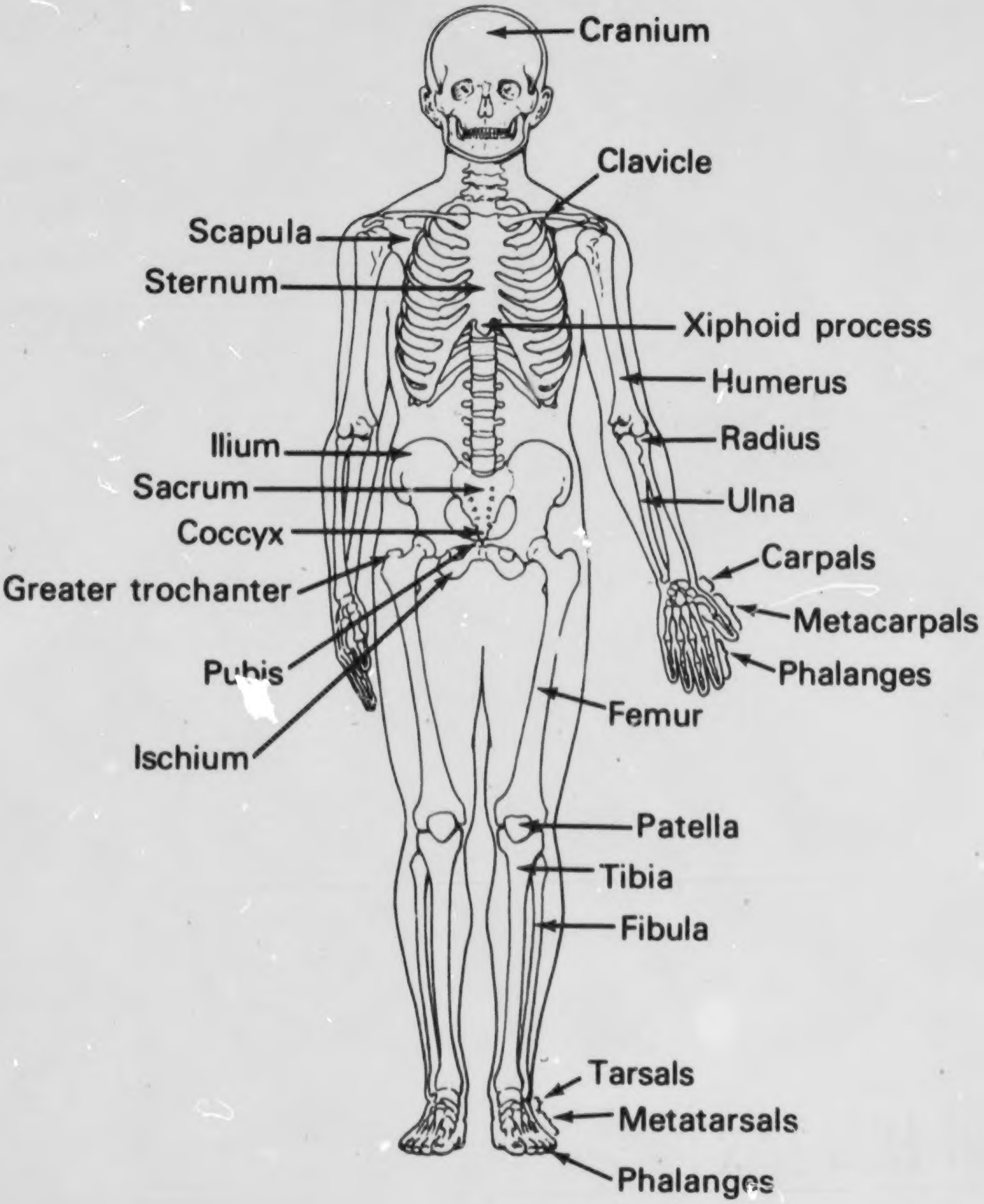
Anterior View of the Skeleton



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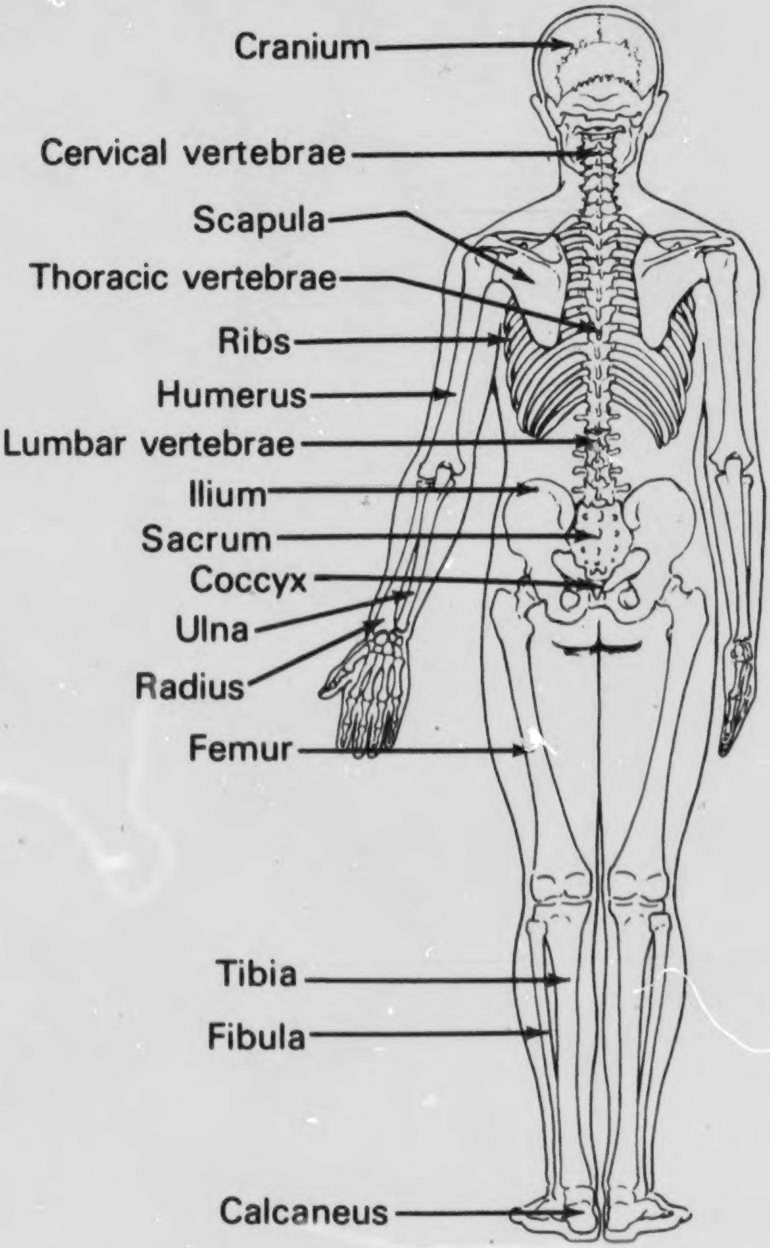
Posterior View of the Skeleton



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MUSCULOSKELETAL SYSTEM
UNIT VI

JOB SHEET #1--GIVE ACTIVE RANGE-OF-MOTION EXERCISES

(NOTE: In order to perform range-of-motion exercises for the patient, it is important for the student to practice them. By doing them, one will be better able to move patient in a normal manner without causing pain or injury.)

I. Exercising upper extremities

A. Neck

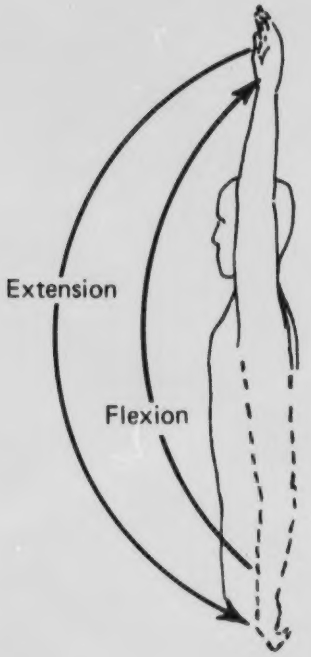
1. Bend head and neck forward until chin touches chest, lift head up and bend back, and return to starting position (flexion and extension)

2. Turn head to left and then to right (rotation)

B. Shoulders

1. Lift arm foward, up over head, and return to side (flexion and extension) (Figure 1)

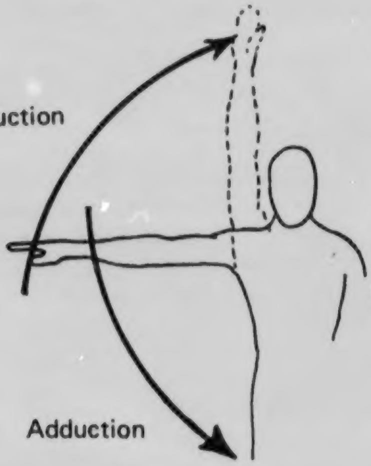
FIGURE 1



JOB SHEET #1

2. Lift arm up and out to side until it is over head; return to the side (abduction and adduction) (Figure 2)

FIGURE 2



3. Flex elbow, bring elbow up to level of the shoulder, and reach the back of your neck with your fingers (external or outward rotation)

4. Flex elbow, draw your arm across your chest, and touch the other shoulder (internal or inward rotation)

C. Elbow--Bend elbow to touch shoulder with your fingertips; straighten elbow (flexion and extension)

D. Wrist

1. Bend palm side of hand down toward arm; then back (flexion and extension)

2. Bend wrist from side to side

E. Fingers

1. Bend fingers to make a fist; then straighten fingers (flexion and extension)

2. Spread fingers fanwise; then bring together (abduction and adduction)

3. Touch thumb into palm; then extend out straight (flexion and extension)

4. Touch tips of each finger with thumb (opposition)

JOB SHEET #1

II. Exercising the trunk

   A. In dorsal recumbent position, slowly raise trunk to sitting position and return (flexion and extension)

   B. In sitting position with hands behind head, bend to the left and then to the right (lateral flexion)

   C. In same position, rotate upper body to the left and to the right (rotation)

III. Exercising lower extremities

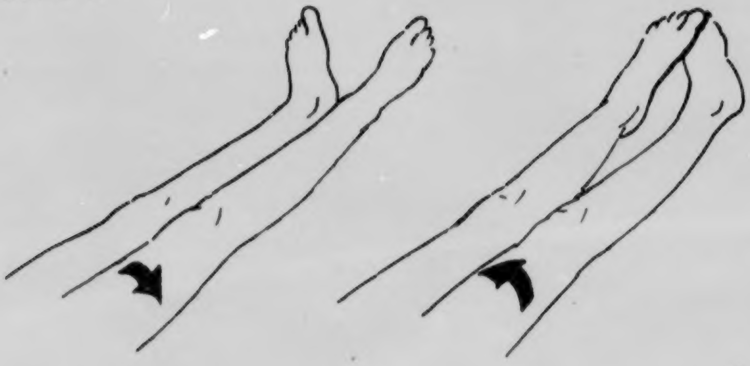
(NOTE: These exercises should be done in supine or recumbent position.)

   A. Hip

      1. With legs straight and toes pointing up, move leg out to side and return (abduction and adduction)

      2. Keeping knees straight, turn legs so toes point inward then outward (internal and external rotation) (Figure 3)

FIGURE 3



External Rotation　　　Internal Rotation

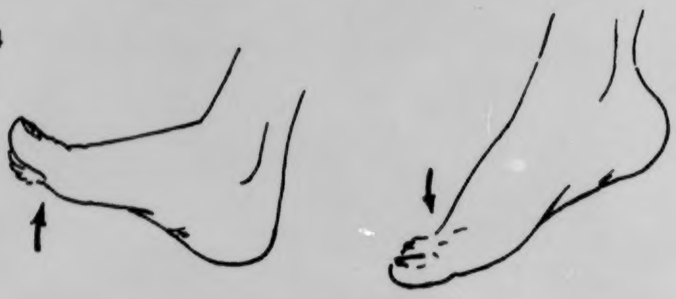
   B. Knee and hip--Bend knee bringing it as close to chest as possible; return to starting position (flexion and extension)

JOB SHEET #1

C. Ankle

1. Bend foot up toward leg and down away from leg (dorsal flexion and plantar flexion) (Figure 4)

FIGURE 4



Dorsal Flexion Plantar Flexion

2. Move ankle in circle (rotation)

MUSCULOSKELETAL SYSTEM
UNIT VI

JOB SHEET #2--GIVE PASSIVE RANGE-OF-MOTION EXERCISES

(NOTE: Stage in the classroom with another student playing the part of a patient who is unable to move the right side of the body due to paralysis. Provide range-of-motion exercises for all joints on affected side. Support dependent part of extremity being exercised and avoid range-of-motion beyond point of pain.)

I. Preparation

  A. Adjust bed to a comfortable working height with patient in supine position· move patient close to edge of bed nearest affected side

  B. Replace top bedding with bath blanket or cover to avoid exposure of part of the body not being exercised

  C. Use principles of proper alignment and body mechanics to avoid excessive fatigue for patient and health assistant

II. Exercising

  A. Neck

    1. Supporting patient's head with your hands, flex patient's neck by bringing head forward until chin touches chest; return head to the pillow

    2. Rotate the head by gently turning to one side and then the other

  B. Shoulder

    1. Cup patient's elbow in right hand; grasp wrist with the left hand

    2. Move patient's arm straight up over head, keeping arm toward midline (flexion)

    3. Flex elbow over patient's head if space does not permit keeping elbow straight

    4. Reverse procedure, returning arm to starting position (extension)

    5. Cup patient's elbow with right hand, cradling lower arm with patient's arm close to side; use left hand to hold shoulder from elevating

JOB SHEET #2

6. Keep patient's arm at bed level and move it out to side to a ninety-degree angle (abduction)

7. Return arm to starting position (adduction)

8. Abduct patient's arm at shoulder to ninety degrees; bend elbow to ninety degrees; support patient's wrist with your right hand and patient's elbow with your left hand; bring forearm toward the bed, palm down (internal rotation)

9. Bring forearm toward bed palm up keeping shoulder and elbow at ninety-degree angle throughout (external rotation)

C. Elbow

1. Bend elbow, with patient's arm at patient's side, palm up, moving patient's hand toward patient's shoulder (flexion)

2. Straighten arm (extension)

3. Grasp patient's hand as if to shake hands; stabilize wrist; turn patient's palm up (supination)

4. Turn patient's palm down (pronation)

D. Wrist

1. Flex patient's elbow, supporting patient's forearm with your left hand and patient's hand with your right hand

2. Bend the wrist forward (flexion)

3. Bend wrist backward (extension)

4. Bend patient's wrist toward little finger (abduction)

5. Bend patient's wrist toward patient's thumb (adduction)

E. Fingers

1. Support patient's wrist with left hand

2. Cup right hand over the back of the patient's hand

3. Beginning with fingertips, bend patient's hand down to form a fist (flexion)

4. Straighten fingers (extension)

JOB SHEET #2

5. Place patient's hand in prone position on bed

6. Move each finger away from middle finger and return (abduction and adduction)

7. Place hand in supine position, flex thumb into palm; then extend it (flexion and extension)

8. Move patient's thumb to touch tips of each finger, supporting fingers as needed; return to normal (opposition)

F. Hip and knee

1. Place left hand under patient's knee and cup heel with right hand, stabilizing ankle

2. Lift patient's leg and bend knee moving patient's leg toward chest as far as possible without causing pain (flexion)

3. Lower leg to bed (extension)

4. Supporting knee and ankle and holding leg straight, move patient's leg out to side and back (abduction and adduction)

5. Place one hand on patient's knee and one on patient's ankle with patient's leg resting on bed; roll entire leg inward, then outward (rotation)

G. Ankle and foot

1. Holding ankle with one hand and foot with the other, pull toes up toward knee; then push them down (dorsal flexion and plantar flexion)

2. Rotate ankle by holding ankle with one hand and turning foot in, then out (rotation)

III. Adjust patient's bed for comfort; replace top covers

IV. Report and record procedure and observations

MUSCULOSKELETAL SYSTEM
UNIT VI

TEST

NAME ______________________________ SCORE ______________

1. Match the terms associated with the muscular system to their correct definitions. Place the appropriate numbers in the blanks provided.

_____a. Lacking muscle tone

_____b. Wasting away

_____c. Within a muscle

_____d. Study of muscles

_____e. Loss of muscle's power to contract after prolonged periods of muscle contraction

_____f. Bundles of striated muscle tissue surrounded by connective tissue

_____g. Slight tension in the muscle which is always present even when muscle is resting

_____h. Narrow strip of dense connective tissue that attaches muscle to a bone

_____i. Muscle which counteracts with a prime mover

_____j. Muscle primarily responsible for a specific action

1. Myology
2. Skeletal muscles
3. Tendon
4. Tonus
5. Flaccid
6. Muscle fatigue
7. Atrophy
8. Prime mover
9. Antagonist
10. Intramuscular

2. Match the terms associated with the skeletal system to their correct definitions by placing the appropriate numbers in the blanks provided.

_____a. White elastic substance attached to bone surfaces at the joints

_____b. Chamber or cavity in a bone

_____c. Hole or opening for passage of blood vessels, nerves, and ligaments

_____d. Pertaining to the central part; skeleton of head and trunk

_____e. Traction applied to skin using adhesive strips held in place by elastic bandages or a special type of heavy cloth belt

1. Foramen
2. Cartilage
3. Sinus
4. Axial
5. Skin traction

______f. Tough, fibrous band binding together bones or supporting internal organs

______g. Study of bones

______h. Point where bones are joined together; a joint

______i. Rounded portion beyond narrow, neck-like portion of a long bone

______j. Anything attached to a larger part; dependent part

______k. Pertaining to a limb or appendage

______l. Traction applied using wires, pins, or tongs through the bones

______m. Study of joints

6. Appendicular
7. Osteology
8. Arthrology
9. Skeletal traction
10. Appendage
11. Articulation
12. Head
13. Ligament

3. Distinguish between functions of muscles and bones by placing an "M" for muscle functions and a "B" for bone functions in the appropriate blanks.

______a. Protect vital organs

______b. Dictate posture and body mechanics

______c. Store minerals such as calcium and phosphorus

______d. Provide shape and support

______e. Assist in body movenet

______f. Manufacture red blood cells, platelets, and some white cells

______g. Allow movement

______h. Protect internal organs

______i. Result in heat and energy due to chemical reaction within the muscle tissue

4. Match terms associated with characteristics of muscle tissue to their correct definitions. Place the appropriate numbers in the blanks provided.

______a. Ability of a muscle to stretch

______b. Ability of a muscle to shorten and thicken when given proper stimulus

______c. Ability of a muscle to respond to stimulation

______d. Ability of a muscle to return to its original length after stretching

1. Contractility
2. Elasticity
3. Extensibility
4. Irritability

5. Match types of muscles to their correct actions by placing the appropriate numbers in the blanks provided.

_____a. Revolve a part on its axis

_____b. Lower a part

_____c. Move away from a part

_____d. Straighten a joint

_____e. Ring-like muscles that close body openings

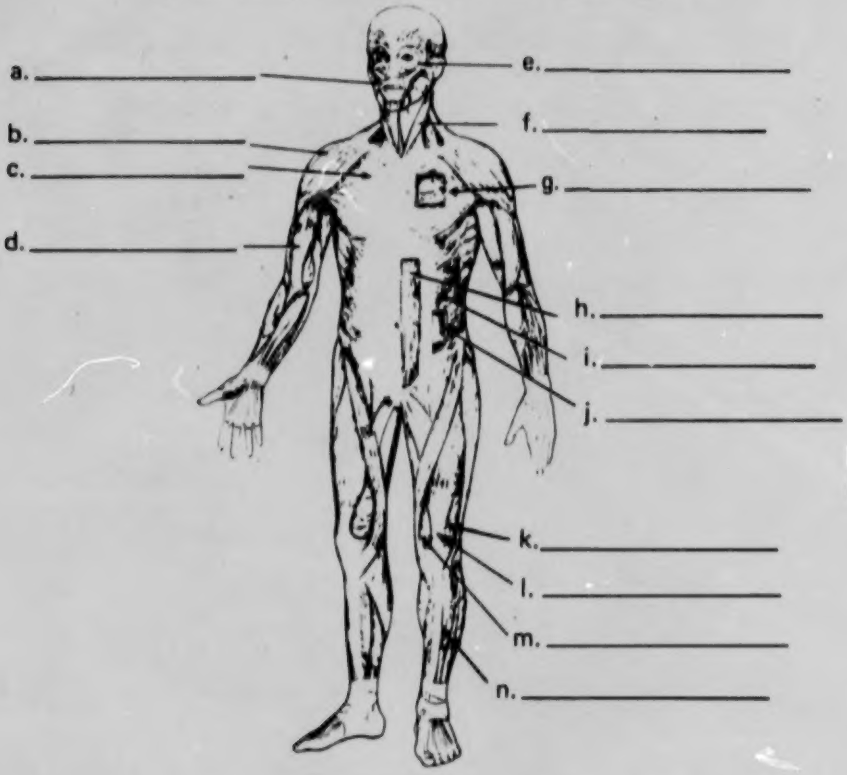
_____f. Bend a joint

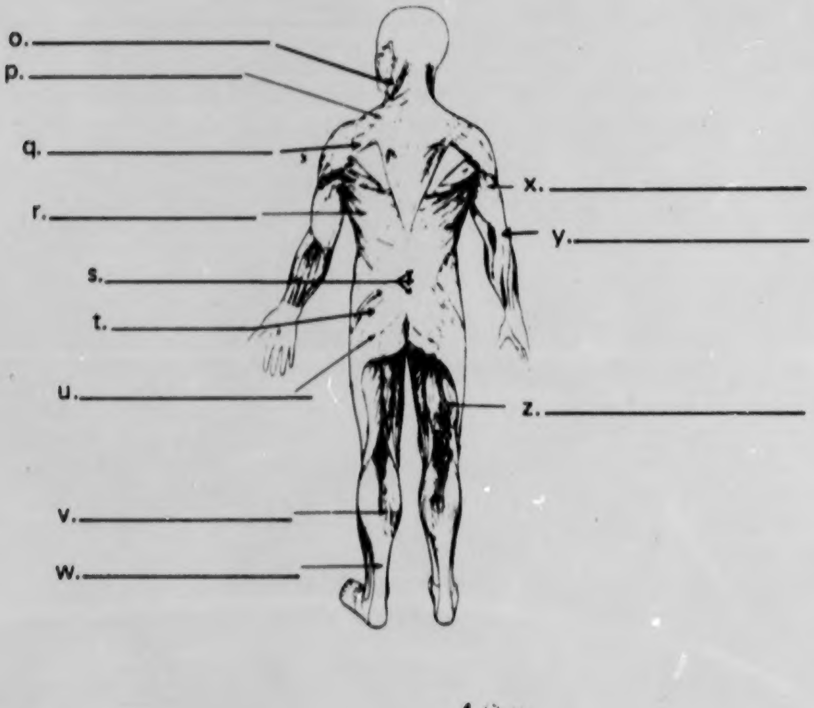
_____g. Move toward a part or to the midline

_____h. Lift a part

1. Abductors
2. Adductors
3. Levators
4. Depressors
5. Flexors
6. Extensors
7. Rotators
8. Sphincters

6. Identify the principal muscles on the diagram below.





7. Distinguish between ways to maintain the muscular and skeletal systems by placing an "M" for the muscular system and an "S" for the skeletal system in the appropriate blanks. There may be more than one answer for each question.

______a. Maintain good posture

______b. Learn to relax voluntary muscles at will

______c. Exercise regularly

______d. Use proper body mechanics at all times

______e. Avoid excessive load which may cause strain

______f. Give special attention to foot care

______g. Maintain an adequate diet

______h. Rest sufficiently to relieve muscle fatigue

______i. Maintain adequate oxygen supply

8. Select from the list below components of bones by placing an "X" in the appropriate blanks.

______a. Water

______b. Inorganic salts

______c. Epithelial cells

______d. Organic materials

______e. Enzymes

9. Classify types of bones by placing an "L" for long bones, an "S" for short bones, an "F" for flat bones, an "I" for irregular bones, and an "SE" for sesamoid bones in the appropriate blanks.

______a. Ribs

______b. Wrist

______c. Patella

______d. Hip

______e. Humerus

______f. Face

______g. Ankle

______h. Tibia

______i. Sternum

______j. Radius

______k. Ulna

______l. Skull

______m. Spinal

______n. Femur

______o. Shoulder blade

______p. Fibula

10. Distinguish between divisions of axial and appendicular skeletons by placing an "AX" for axial skeleton and an "AP" for appendicular skeleton in the appropriate blanks.

    ______a. Upper extremities

    ______b. Ribs and sternum

    ______c. Vertebrae

    ______d. Lower extremities

    ______e. Skull

11. Classify the types of joints in the list below according to the amount of movement. Place an "I" for immovable, "SM" for slightly movable, and "FM" for freely movable in the appropriate blanks.

    ______a. Symphysis pubis

    ______b. Cranium

    ______c. Elbow, wrist, and finger joints

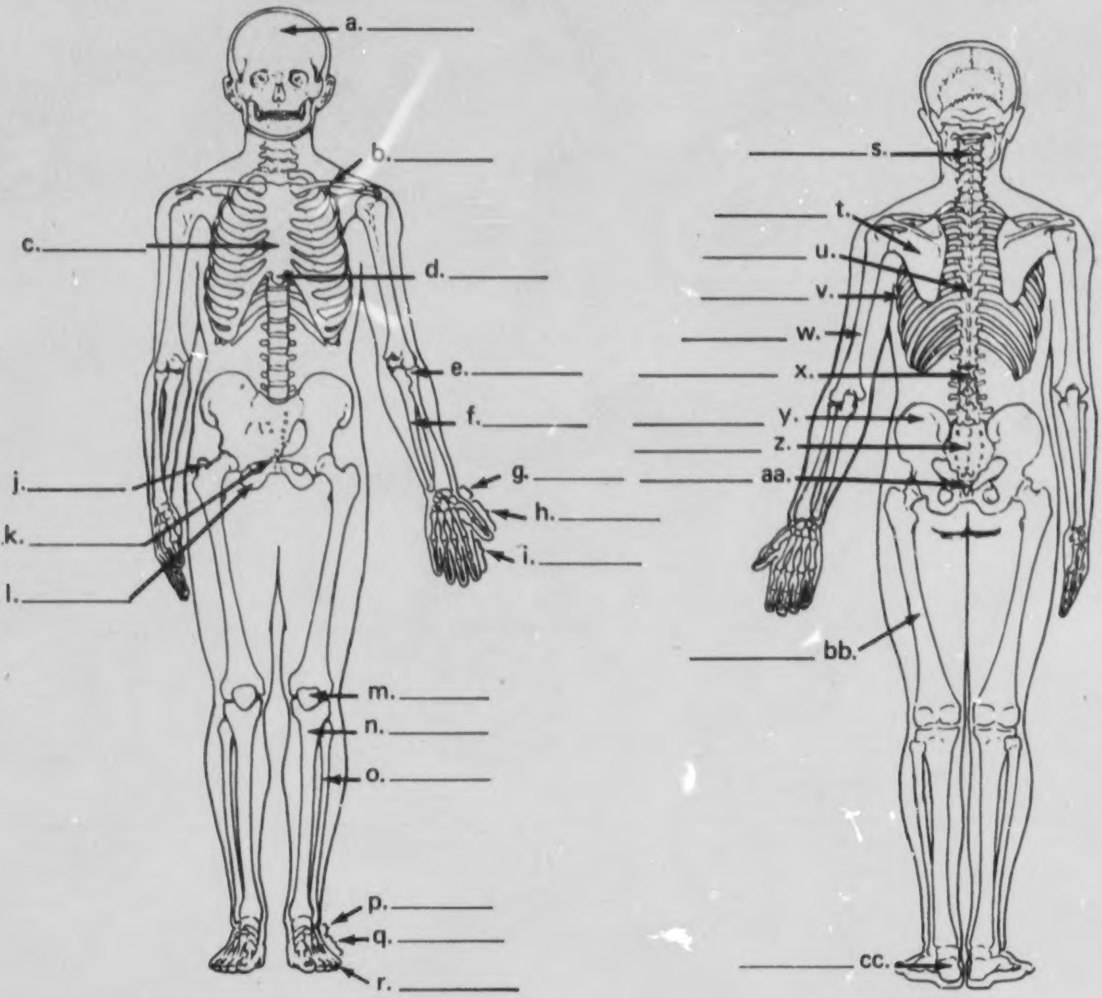
    ______d. Shoulder joints

    ______e. Sacroiliac joints

    ______f. Vertebral discs

    ______g. Knee and ankle joints

12. Identify the bones on the diagrams below.



13. Discuss care of patients in traction.

14. Name the types of casts.

a. ____________________________________

b. ____________________________________

c. ____________________________________

15. Discuss care of patients in casts.

____

____

____

____

____

____

____

____

16. Demonstrate the ability to:

a. Give active range-of-motion exercises.

b. Give passive range-of-motion exercises.

(NOTE: If the above activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

MUSCULOSKELETAL SYSTEM
UNIT VI

ANSWERS TO TEST

1. a. 5
   b. 7
   c. 10
   d. 1
   e. 6
   f. 2
   g. 4
   h. 3
   i. 9
   j. 8

2. a. 2
   b. 3
   c. 1
   d. 5
   e. 4
   f. 13
   g. 7
   h. 11
   i. 12
   j. 10
   k. 6
   l. 9
   m. 8

3. a. B
   b. M
   c. B
   d. B
   e. B
   f. B
   g. M
   h. M
   i. M

4. a. 3
   b. 1
   c. 4
   d. 2

5. a. 7
   b. 4
   c. 1
   d. 6
   e. 8
   f. 5
   g. 2
   h. 3

6. a. Oribicularis oris
b. Deltoid
c. Pectoralis major
d. Biceps brachii
e. Orbicularis oculi
f. Sternocleidomastoid
g. Intercostals
h. Rectus abdominis
i. External oblique
j. Internal oblique
k. Vastus lateralis
l. Vastus intermedius
m. Vastus medialis
n. Tibias Anterior
o. Sternocleidomastoid
p. Trapezius
q. Deltoid
r. Latissimus dorsi
s. Aponeurosis
t. Gluteus Medius
u. Gluteus Maximus
v. Gastrocnemius
w. Achilles Tendon
x. Triceps Brachii
y. Olecranon Process
z. Biceps Femoris

7. a. S
b. M
c. S, M
d. S, M
e. M
f. S
g. S, M
h. M
i. M

8. a, b, d

9. a. F
b. S
c. SE
d. I
e. L
f. I
g. S
h. L
i. F
j. L
k. L
l. F
m. I
n. L
o. F
p. L

10. a. AP
    b. AX
    c. AX
    d. AP
    e. AX

11. a. SM
    b. I
    c. FM
    d. FM
    e. SM
    f. SM
    g. FM

12. a. Cranium
    b. Clavicle
    c. Sternum
    d. Xiphoid process
    e. Radius
    f. Ulna
    g. Carpals
    h. Metacarpals
    i. Phalanges
    j. Greater trochanter
    k. Pubis
    l. Ischium
    m. Patella
    n. Tibia
    o. Fibula
    p. Tarsals
    q. Metatarsals
    r. Phalanges
    s. Cervical Vertebrae
    t. Scapula
    u. Thoracic Vertebrae
    v. Ribs
    w. Humerus
    x. Lumbar Vertebrae
    y. Llium
    z. Sacrum
    aa. Coccyx
    bb. Femur
    cc. Calcaneus

13. Discussion should include:
    a. Maintain body alignment as prescribed
    b. Do not remove weights without an order
    c. Be sure pulley ropes are in proper alignment and weights hang free
    d. Keep siderails up

- e. Use fracture pan if patient is on bedrest
- f. Avoid covering any parts of traction apparatus
- g. Avoid bumping or jarring bed or traction apparatus
- h. Give proper skin care
- i. Make sure to have assistance to turn patient, if permissable, in a smooth procedure

14. a. Arm
    b. Leg
    c. Body

15. Discussion should include:
    - a. Handle cast carefully if still wet to avoid any indention that might cause pressure points; use palms of hands to hold cast
    - b. Inspect cast and injured area frequently to check for pressure areas, swelling, inflamed areas, soiled areas, and peculiar odors under cast
    - c. Change positon frequently if permissable
    - d. Give good skin care
    - e. Keep bed linens smooth
    - f. Support cast with pillows, sandbags, or sling as indicated to relieve pressure on body

16. Performance skills evaluated to satisfaction of instructor

(NOTE: If the above activities have not been accomplished prior to the test, ask the instructor they will be completed.)

NERVOUS SYSTEM
UNIT VII

UNIT OBJECTIVE

After completion of this unit, the student should be able to name functions of the nervous system and the most important senses. The student should also be able to describe the care of the eyes and ears and demonstrate the ability to test reflexes, cranial nerves, hearing and measure vision. This knowledge will be evidenced through completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with the nervous system to their correct definitions.
2. Name functions of the nervous system.
3. Classify components of different parts of the nervous system.
4. Identify main sections of the central nervous system.
5. Match areas of the cerebral cortex to their correct functions.
6. Match parts of the brain to their correct functions.
7. Name functions of the spinal cord.
8. Describe the protection of the central nervous system.
9. Name ways to maintain the nervous system.
10. Match terms associated with the special senses to their correct definitions.
11. Name the most important senses.
12. Match eye and accessory structures to their correct functions.
13. Identify structures of the ear on a diagram.
14. Discuss the sense of taste.
15. Discuss the sense of smell.
16. Discuss care of the eyes.

17. Discuss care of the ears.
18. Describe reaction of taste buds.
19. Demonstrate the ability to:
    a. Test reflexes of other students.
    b. Test cranial nerves.
    c. Measure vision.
    d. Test hearing.

NERVOUS SYSTEM
UNIT VII

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information, assignment, and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information sheet.

   F. Obtain materials and equipment needed to complete job sheets and assignment sheets.

   G. Discuss and demonstrate job sheets.

   H. Allow time and provide resources to complete assignment sheets.

   I. Invite resource persons from the optical field to visit class to discuss good vision and/or career opportunities.

   J. Take field trips to see local optical offices if available.

   K. Set up an eye check station for students to give other students and staff eye checks.

   (NOTE: This may be used for HOSA activities.)

   L. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Human Nervous System

      2. TM 2--The Cranial Nerves

      3. TM 3--Sections of the Central Nervous System

      4. TM 4--Functional Areas of the Brain

      5. TM 5--The Eye

      6. TM 6--Muscles of the Eyeball

7. TM 7--The Eye and Accessory Structures

8. TM 8--The Ear

9. TM 9--The Tongue and Taste

10. TM 10--The Nose and Sense of Smell

D. Assignment sheets

1. Assignment Sheet #1--Discuss Care of the Eyes

2. Assignment Sheet #2--Discuss Care of the Ears

3. Assignment Sheet #3--Describe Reaction of Taste Buds

E. Job sheets

1. Job Sheet #1--Test Reflexes of Other Students

2. Job Sheet #2--Test Cranial Nerves

3. Job Sheet #3--Measure Vision

4. Job Sheet #4--Test Hearing

F. Test

G. Answers to test

III. Unit references:

A. Culver, Vivian M. *Modern Bedside Nursing.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1969.

B. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

IV. Additional materials:

A. Films

1. "Human Body: The Nervous System." Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.

2. "Eyes and Their Care." Oklahoma State Department of Health.

3. "You and Your Ears." Oklahoma State Department of Health.

B. Filmstrips

1. "The Special Senses." Robert J. Brady Company, A Prentice Hall Co., Bowie, Maryland 20715.
2. "The Nervous System." Robert J. Brady Company.

C. Pamphlets--American Optometric Association, 7000 Chippewa Street, St. Louis, Missouri 63119, phone (314) 832-5770.

NERVOUS SYSTEM
UNIT VII

INFORMATION SHEET

I. Terms and definitions

   A. Neurology--Study of the nervous system

   B. Neuron--Basic nerve cell

   C. Nerve--Bundle of nerve fibers, blood vessels, and connective tissue outside the central nervous system

   D. Ganglion--Mass of nerve tissue, principally nerve cell bodies, outside the central nervous system

   E. Cerebrospinal fluid--Watery fluid found in the ventricles of the cerebrum and surrounding the spinal cord

   F. Ventricle--Small brain cavity

   G. Stimulus--Any agent or influence that produces a response or increase in activity in living protoplasm

   H. Regeneration--Repair, regrowth, or restoration of a part

   I. Affector--Group of cells functioning in reception of stimuli; receiving end of sensory nerves

      (NOTE: These are receptor nerves.)

   J. Effector--Nerve endings that carry out actions

      (NOTE: These are motor nerves.)

   K. Cerebral cortex--Outer layer of the cerebrum

II. Functions of the nervous system

   A. Reception of external impressions and information

      (NOTE: These are external stimuli.)

   B. Coordination of internal messages

      (NOTE: These are internal stimuli.)

   C. Response and readjustment to internal and external stimuli

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INFORMATION SHEET

D. Storage of information

(NOTE: This is memory.)

E. Coordination of all body activities

III. Parts of the nervous system and their components (Transparency 1)

A. Central nervous system

1. Brain

2. Spinal cord

B. Peripheral nervous system

(NOTE: These nerves extend to outlying parts of the body.)

1. Cranial nerves (Transparency 2)

(NOTE: There are twelve pairs.)

2. Spinal nerves

(NOTE: There are thirty-one pairs.)

C. Autonomic nervous system--Involuntary nervous system

(NOTE: This part of the system regulates the action of the glands, the smooth muscles of the hollow organs, and the heart automatically without one being consciously aware of them much of the time.)

IV. Main sections of the central nervous system (Transparency 3)

A. Brain

1. Forebrain

a. Cerebrum

b. Thalamus

c. Hypothalamus

2. Midbrain

INFORMATION SHEET

3. Hindbrain
    a. Pons
    b. Medulla oblongata
    c. Cerebellum

B. Spinal cord

V. Functions of the cerebral cortex (Transparency 4)

A. Motor area--Controls movement of muscles

B. Sensory area--Receives impulses of heat, cold, touch, pain, and pressure from receptors

C. Association area--Controls higher mental functions

Examples: Learning, memory, reasoning, judgement, conscience, thinking, insight, and emotions

VI. Functions of the brain (Transparency 4)

(NOTE: The left side of the brain controls the right side of the body, and the right side of the brain controls the left side of the body.)

A. Frontal lobe of cerebrum--Controls voluntary muscles and judgment

B. Parietal lobe of cerebrum--Controls sensory functions, such as pain, touch, and temperature interpretation

C. Temporal lobe of cerebrum--Controls hearing, smell, and taste

D. Occipital lobe of cerebrum--Controls vision

E. Thalamus--Serves as relay center; monitors sensory stimuli

F. Hypothalamus--Controls body temperature, water balance, sleep, appetite, some emotions such as fear and pleasure, and both divisions of the autonomic nervous system

G. Midbrain--Serves as a reflex center

H. Pons--Connects the cerebrum and cerebellum

(NOTE: This is the site of fifth, sixth, seventh, and eighth cranial nerves.)

I. Medulla--Controls vital functions, such as breathing, heart rate, blood pressure, swallowing, and coughing

J. Cerebellum--Maintains balance, equilibrium, coordination, and muscle tone

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INFORMATION SHEET

VII. Functions of the spinal cord

- A. Conducts impulses to and from the brain
- B. Serves as a reflex center to receive and transmit messages through nerve fibers

VIII. Protection of the central nervous system

- A. Fluid, membrane, and bones protect fragile nervous tissue
- B. Cranial bones encase the brain
- C. Vertebrae encase the spinal cord
- D. Meninges, a tough membrane, lines cranial bones and vertebrae with three layers of tissue

IX. Maintenance of the nervous system

- A. Adequate diet with particular attention to vitamins A, B, C, riboflavin, niacin, pyridoxine, proteins, and carbohydrates essential for energy
- B. Avoidance of excessive use of substances which may adversely affect the nervous system

  Examples: Alcohol, carbon monoxide, barbiturates, caffeine, and nicotine
- C. Prompt care of infections and injuries to minimize loss of nerve function
- D. Extra care to prevent further tissue damage in cases of nerve damage with loss of function or sensation
- E. Genetic counseling for parents who are carriers of inherited disorders of the nervous system
- F. Testing of newborn infants for phenylketonuria

  (NOTE: Phenylketonuria, PKU, is an inherited metabolic disorder which can produce mental retardation unless detected and treated in infants.)
- G. Treatment of inherited or congenital defects to the fullest extent possible
- H. Adequate sleep to provide rest for the nervous system
- I. Injections of medicines given in areas where there is minimum chance of contact with nerves

INFORMATION SHEET

J. Periods of relaxation

K. Periods of productive activity

L. Practice of good mental hygiene

M. Use of drugs only by physician's orders

X. Terms and definitions associated with the special senses

A. Ophthalmology--Study of the eye and its diseases

B. Otology--Study of the ear and its diseases

C. Sense--General faculty through which conditions outside or inside the body are perceived

D. Orbit--Cavity in the bone in which the eye is located

(NOTE: The orbit is lined with layer of fatty tissue and acts as protection for eye.)

E. Pupil--Opening in the iris which permits light to enter

F. Ophthalmologist--Physician who specializes in the treatment of eye disorders

G. Intrinsic--Within a part

H. Extrinsic--Outside a part

I. Cerumen--Waxlike, soft, brown secretion found in the external ear canal; lubricates and protects external canal and tympanum/tympanic membrane

J. Malleus--Hammer-shaped bone of the middle ear

K. Incus--Anvil-shaped bone of the middle ear

L. Stapes--Stirrup-shaped bone of middle ear

M. Auditory--Pertaining to the sense of hearing

N. Equilibrium--Normal orientation of the body in respect to its environment

O. Taste buds--Receptors of taste found in the tongue

P. Olfactory--Pertaining to sense of smell

Q. Accommodation--Adjustment by the lens to make a sharp, clear image on the retina

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INFORMATION SHEET

XI. Most important senses

- A. Vision
- B. Hearing
- C. Taste
- D. Smell
- E. Hunger and thirst
- F. Touch, pressure, heat, cold, and pain
- G. Position and balance

XII. Functions of the eye and accessory structures (Transparencies 5, 6, and 7, Assignment Sheet #1)

- A. Conjunctiva--Covers the front of the eyeball; lines the eyelid; aids in keeping the eye moist
- B. Choroid--Middle vascular layer on lateral and posterior eyeball; supplies oxygen and nutrients
- C. Iris--Circular muscle; regulates amount of light entering pupil; the pigmented or colored part of the eye
- D. Ciliary muscle--Controls shape of lens to make sharp, clear image
- E. Sclera--Outer white layer of firm, connective tissue; covering of eyeball
- F. Cornea--Clear, transparent part of the sclera on the front of eyeball; allows light through
- G. Lens--Circular jelly-like suspension; focuses images on retina
- H. Suspensory or ciliary ligament--Hold lens in place
- I. Anterior chamber--Space in front of lens between cornea and iris
- J. Posterior chamber--Space between iris and lens
- K. Vitreous humor--Jelly-like substance filling the eyeball posterior to the lens; maintains shape of eyeball
- L. Retina--Inner layer of nerve tissue made up in part of rods and cones, special light sensitive cells; receives visual images
- M. Optic nerve--Carries visual impulses from retina to brain

INFORMATION SHEET

N. Lacrimal gland--Lies superior and lateral to eyeball; secretes tears which moisten and cleanse eye and destroy some bacteria

O. Lacrimal ducts--In upper and lower eyelids at inner edge; carry tears from eye to nasal cavity

P. Eyelid muscles--Levators which open and close eyelids

Q. Oculomotor nerve--Controls part of eye muscles

R. Opthalmic nerve--Carries impulses of pain, touch, and temperature from eye and surrounding parts

XIII. Structures of the ear (Transparency 8, Assignment Sheet #2)

A. Outer ear

1. Pinna or auricle

(NOTE: The pinna catches air vibrations or sounds.)

2. External auditory canal

(NOTE: The external auditory canal guides air vibrations to the tympanum.)

3. Tympanum (tympanic membrane or eardrum)

(NOTE: The tympanum protects the middle ear and vibrates when sounds strike it; it is also known as eardrum or tympanic membrane.)

B. Middle ear

1. Ossicles--Malleus, incus, and stapes

(NOTE: Malleus, incus, and stapes amplify sound waves received from the tympanum and transmit waves to inner ear.)

2. Oval window

(NOTE: The oval window separates middle and inner ear.)

3. Round window

(NOTE: The round window permits passage of sound waves from ossicles to inner ear.)

4. Eustachian tubes

(NOTE: The eustachian tubes regulate pressure in middle ear to equal pressure outside tympanum.)

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INFORMATION SHEET

C. Inner ear

1. Cochlea

(NOTE: The cochlea contains Corti, the organ for hearing.)

2. Vestibule

(NOTE: The vestibule controls the sense of position.)

3. Semicircular canals

(NOTE: The semicircular canals control equilibrium.)

XIV. Sense of taste (Transparency 9, Assignment Sheet #3)

A. Taste buds relay impulses to two different nerves which carry the impulses to the brain

B. Taste buds are stimulated only if substance to be tasted is in solution

C. Different kinds of taste have separate locations on the tongue

1. Sweet taste is located near the tip of the tongue

2. Sour taste is located at the sides of the tongue

3. Salty taste is located near the tip of the tongue

4. Bitter taste is located at the back of the tongue

XV. Sense of smell (Transparency 10)

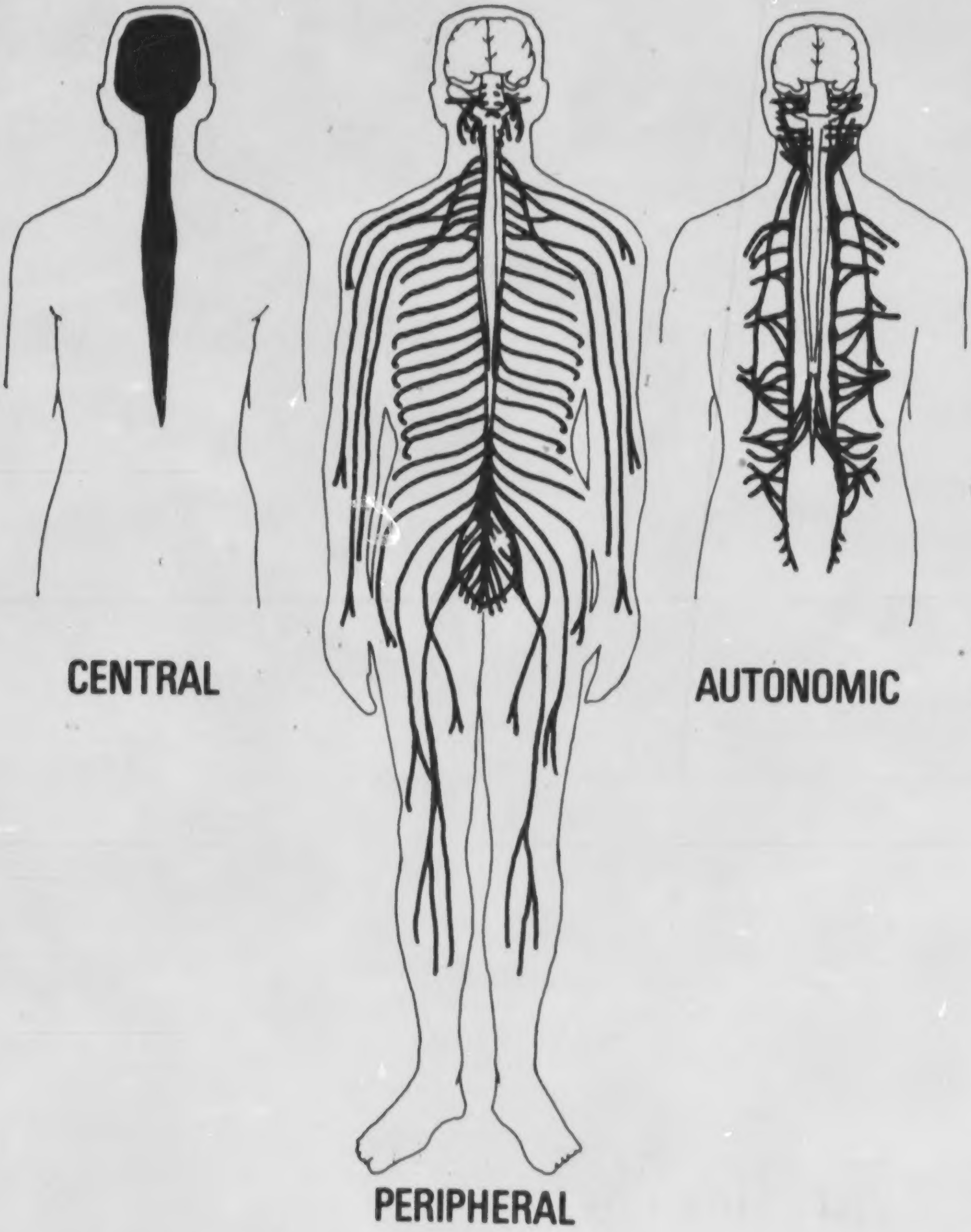
A. Sense of smell is closely related to the sense of taste

B. Receptors are located in the olfactory epithelium in the upper part of the nasal cavity

C. Olfactory nerve carries smell impulses to the brain

D. Olfactory nerves tire quickly and become less sensitive after detecting the same odor for a period of time

Human Nervous System



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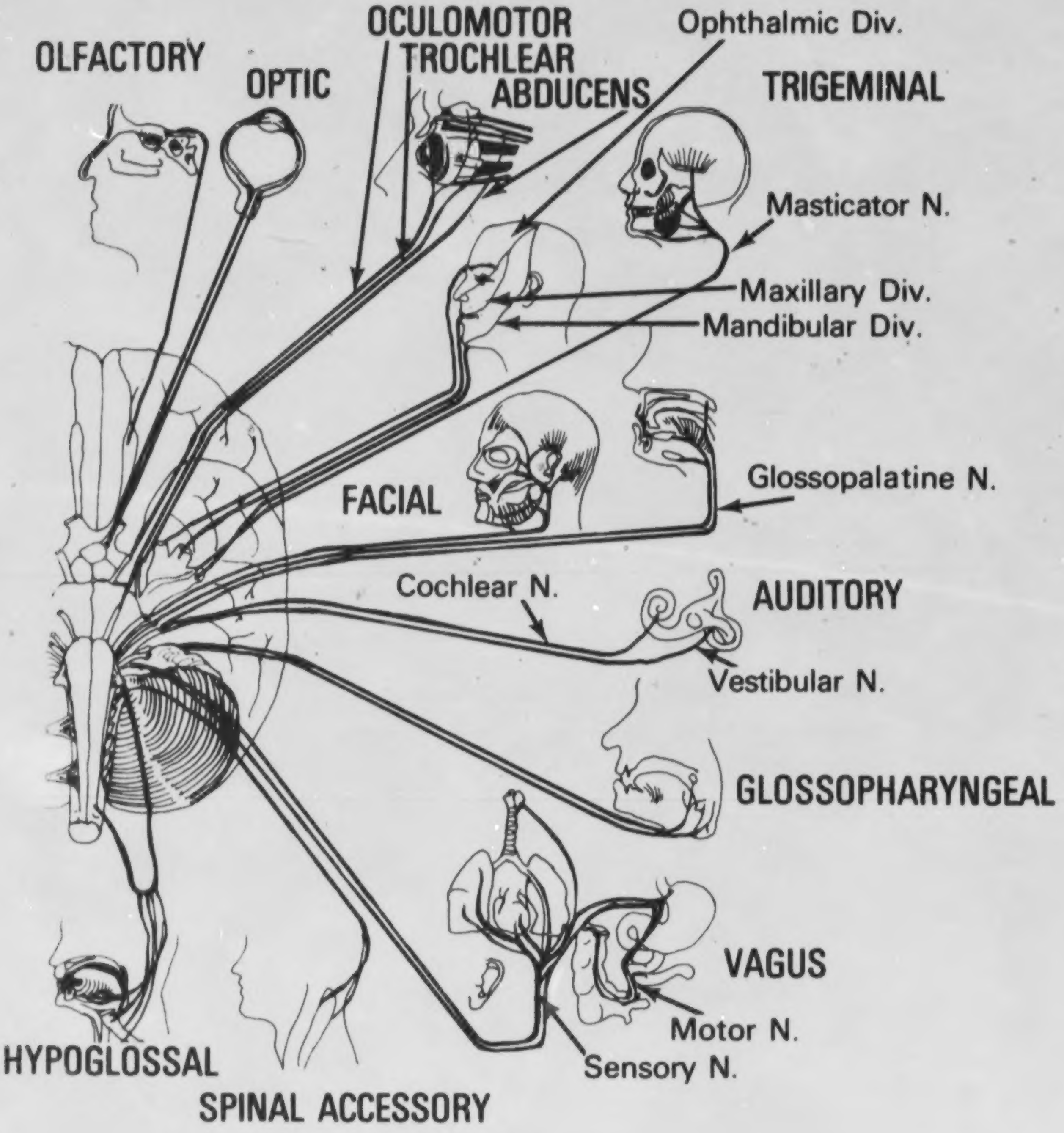
The Cranial Nerves



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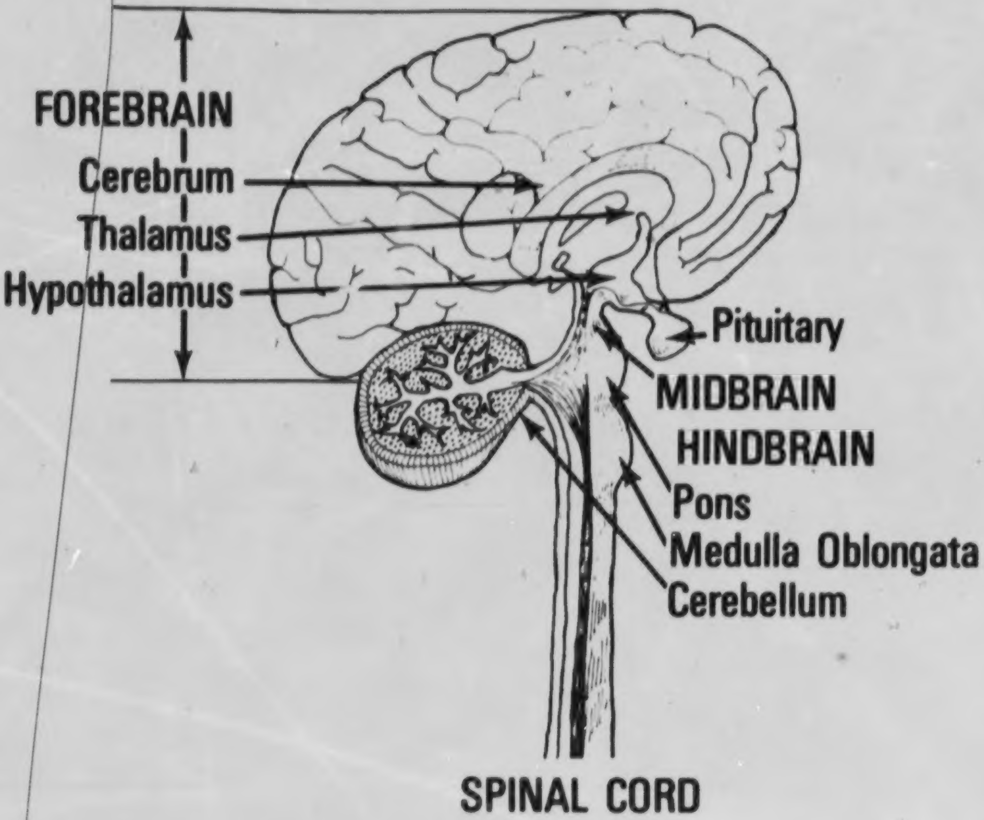
Sections of the Central Nervous System



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TM 3

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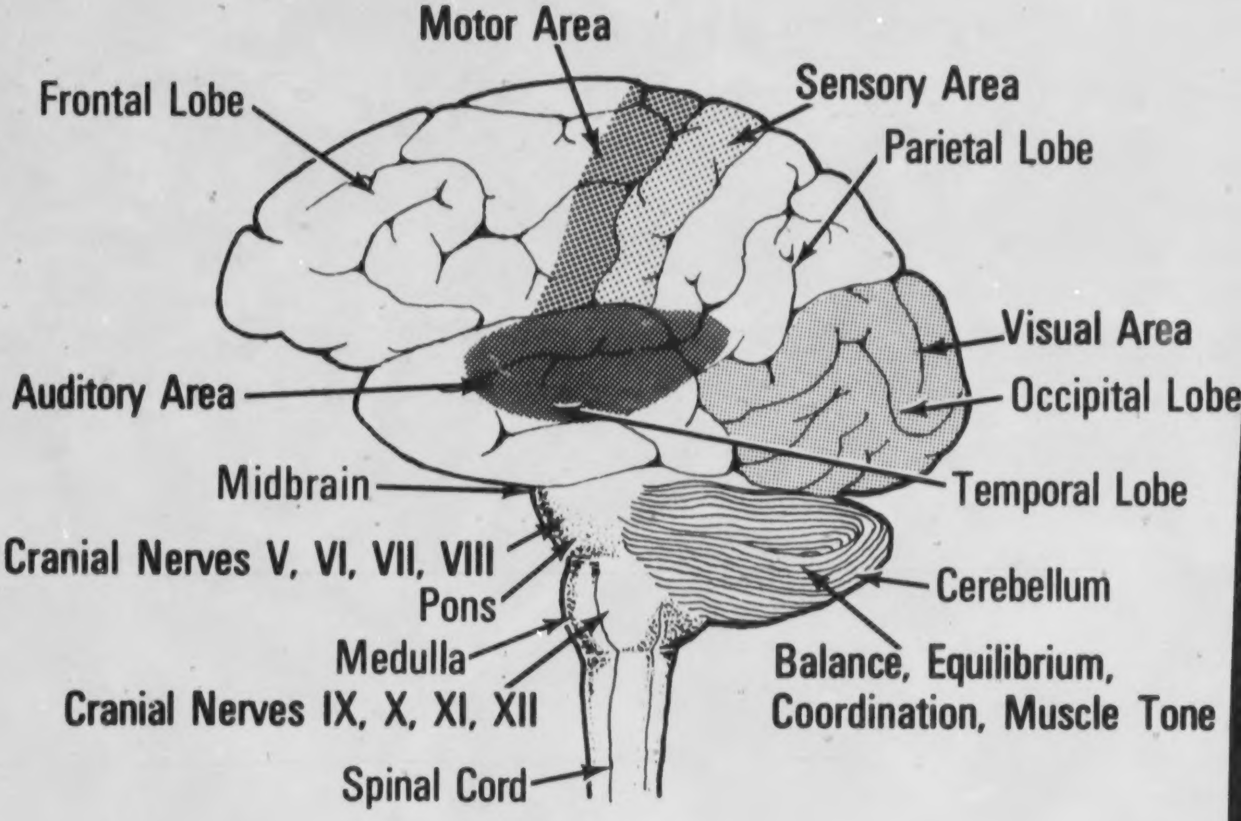
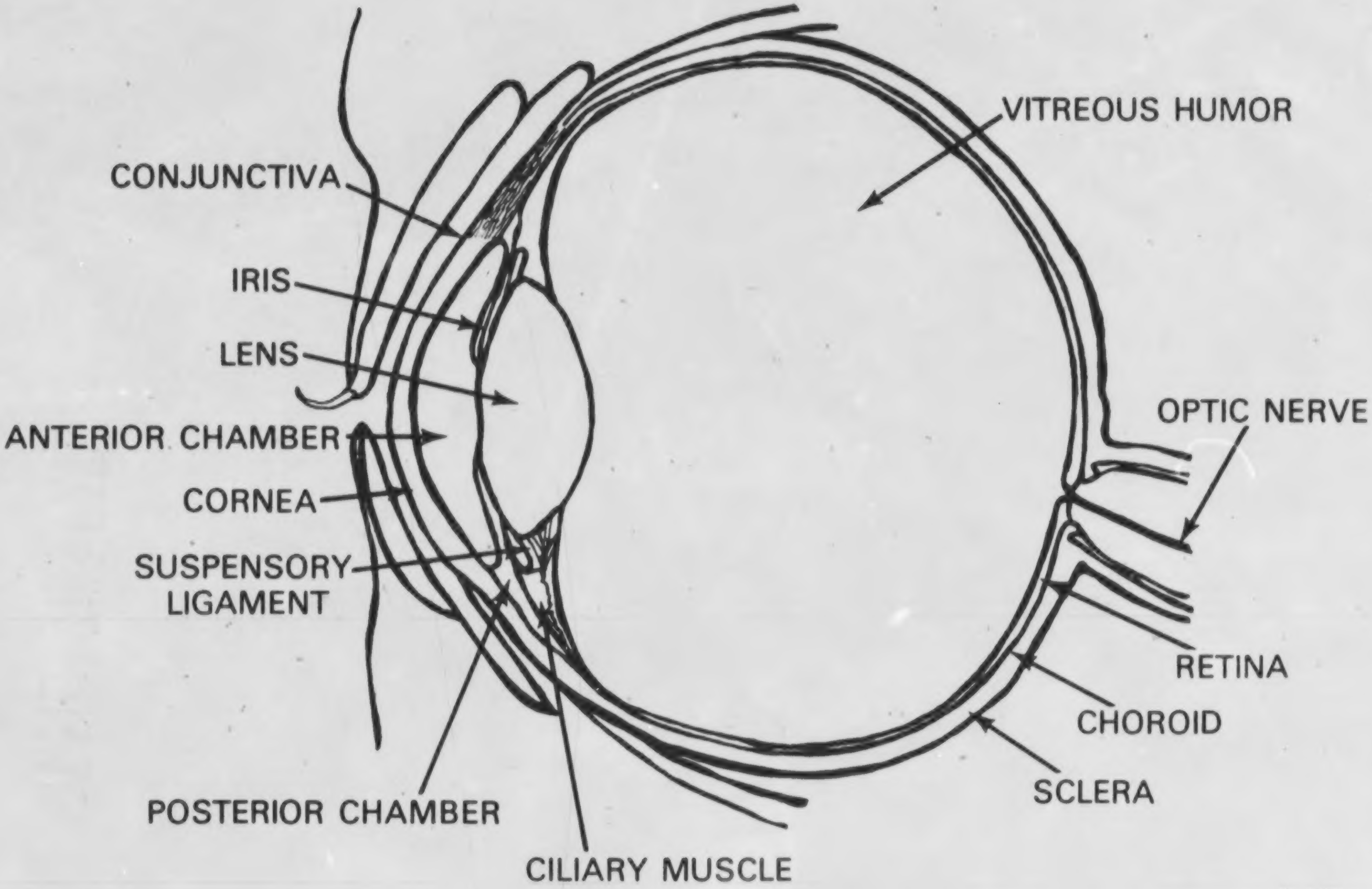
TM 4

Functional Areas of the Brain



The Eye



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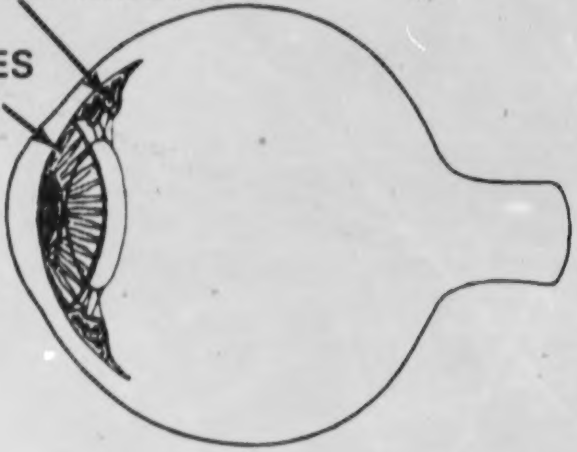
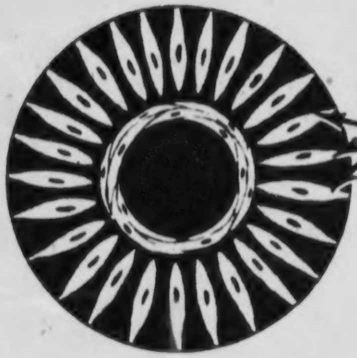
Muscles of the Eyeball

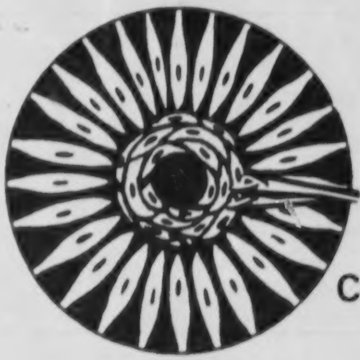
EYE MUSCLES



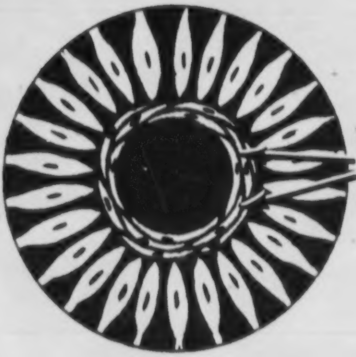


when radial muscle fibers of iris contract:

PUPIL IS DILATED



when circular muscle fibers of iris contract:
PUPIL IS CONSTRICTED



when circular muscle fibers of iris relax:
PUPIL IS DILATED

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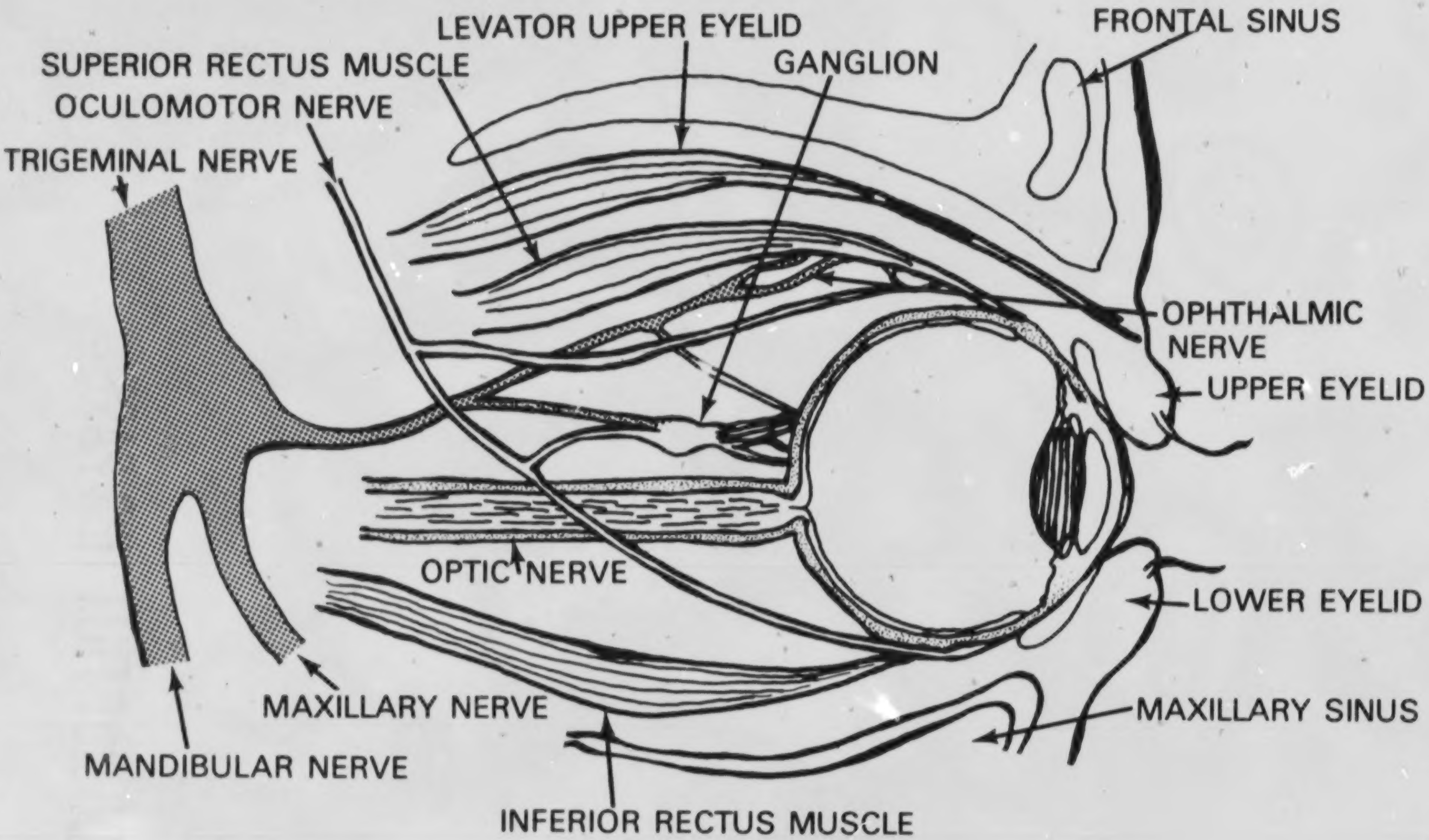
The Eye and Accessory Structures



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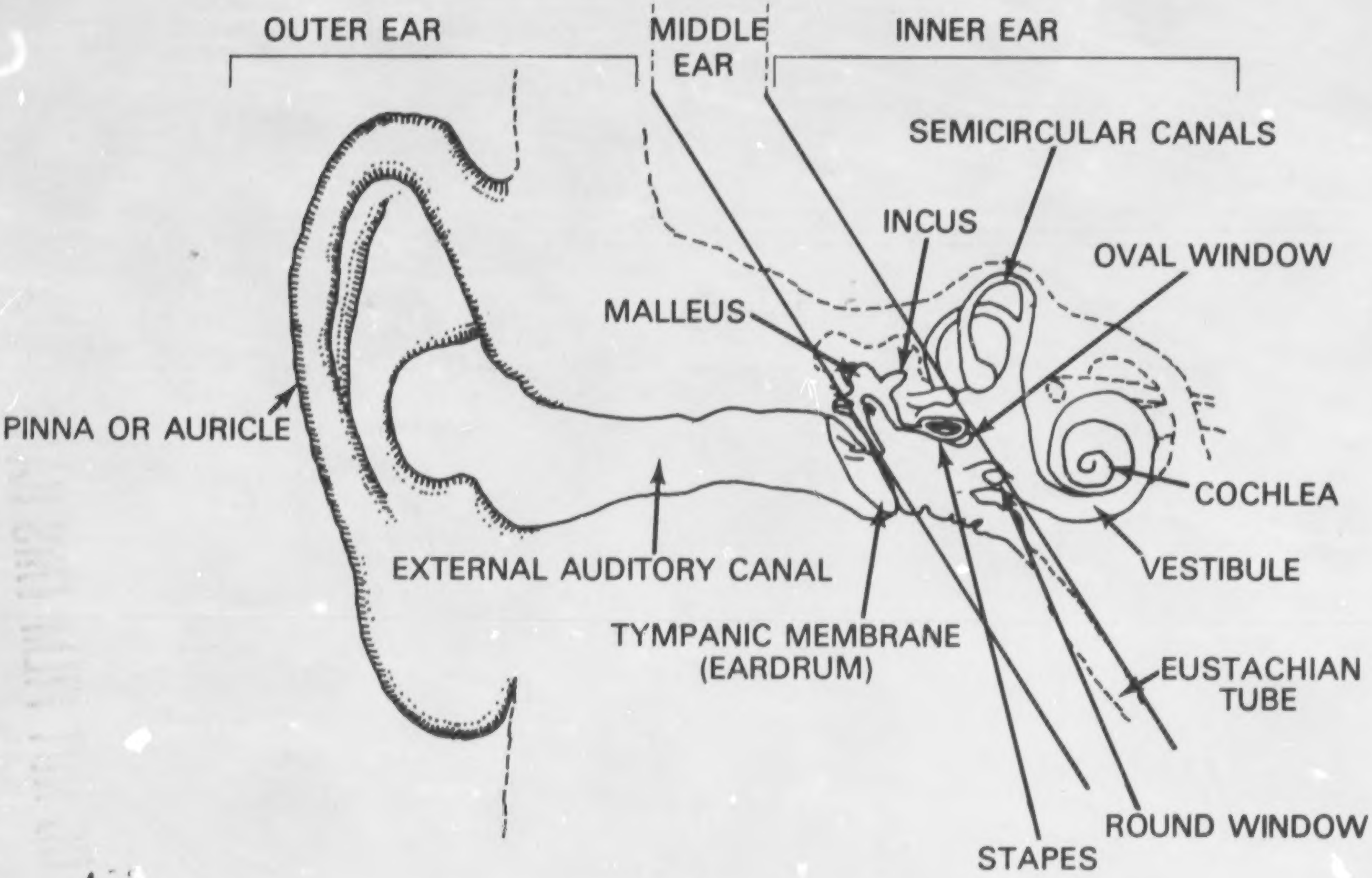
The Ear



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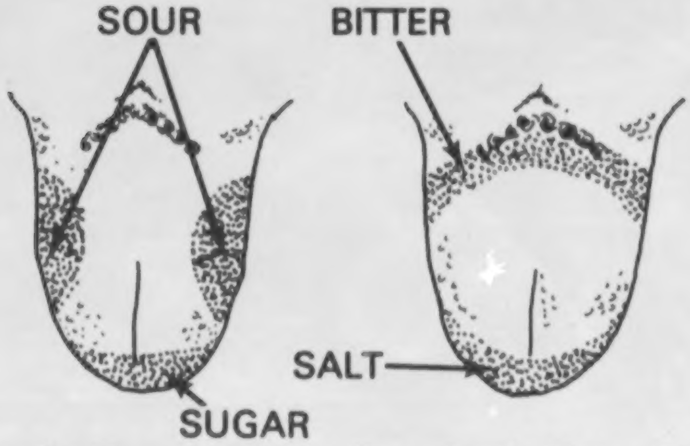
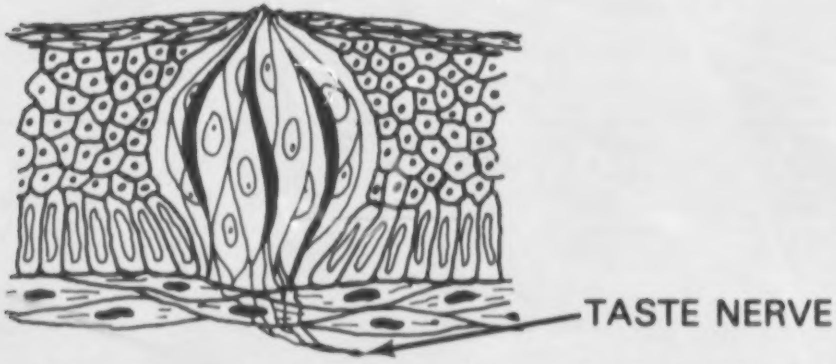
The Tongue and Taste



Location on the Tongue of the Four Basic Taste Sensations



Taste Buds are Special Cells on the Tongue containing Nerve Endings Sensitive to Taste

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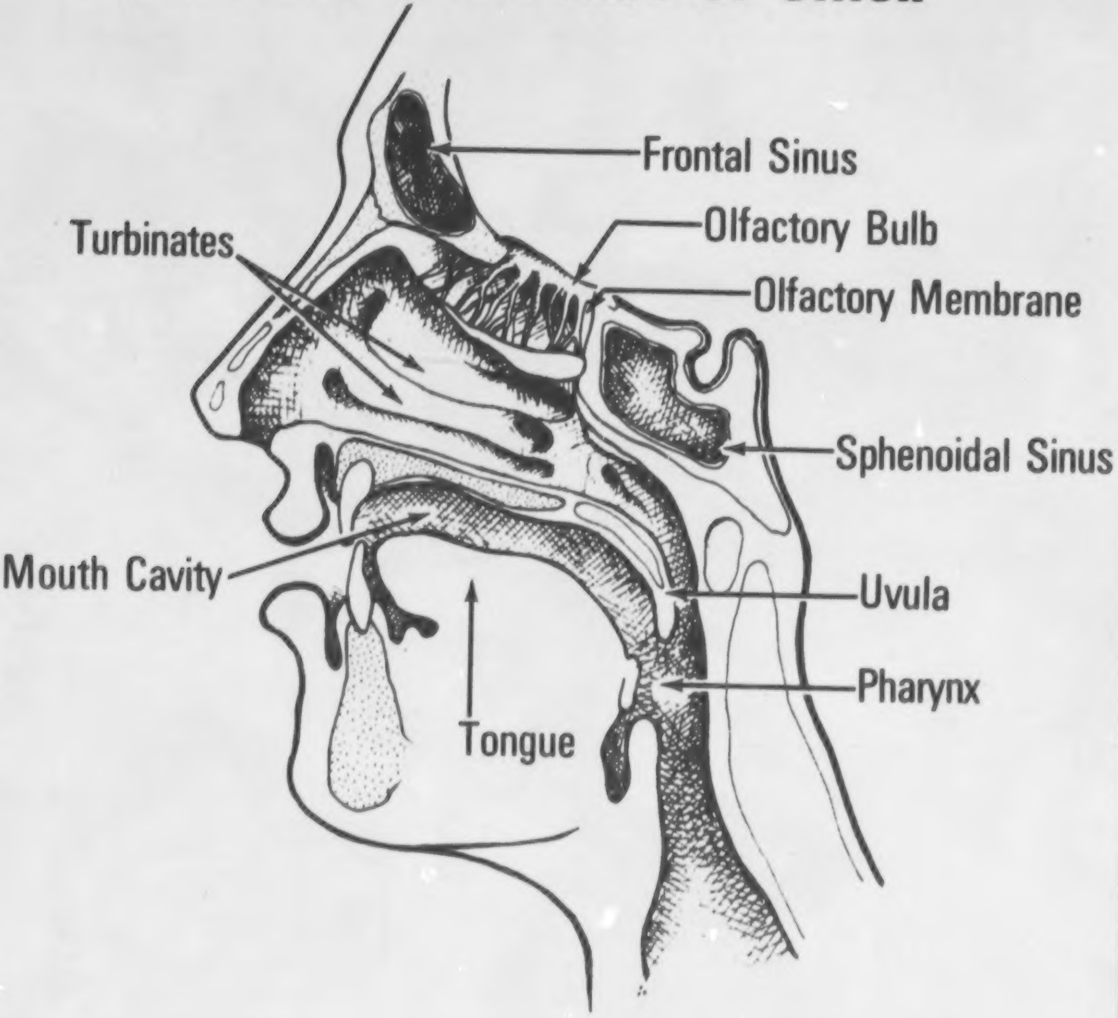
The Nose and Sense of Smell



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TM 10

NERVOUS SYSTEM
UNIT VII

ASSIGNMENT SHEET #1--DISCUSS CARE OF THE EYES

Taking care of your eyes is important now and for the future. Discuss below the factors to include in the health care of your eyes. Include diet, hygiene, accident prevention, professional care, prevention of eye strain, eye tests, eye diseases and their prevention, and symptoms that might occur if you are needing special care of the eyes.

NERVOUS SYSTEM
UNIT VII

ASSIGNMENT SHEET #2--DISCUSS CARE OF THE EARS

Hearing is one of our most important senses. Discuss below the care of the ears. Include hygiene, upper respiratory infections and their association with the health of the ear, symptoms of conditions that may be harmful for the ears, and the importance of keeping a low noise environment.

NERVOUS SYSTEM
UNIT VII

ASSIGNMENT SHEET #3--DESCRIBE REACTION OF TASTE BUDS

Taste is an important factor in good health and nutrition. Most people enjoy eating foods that taste good and avoid bad-tasting substances.

Using the knowledge you have of the taste buds and their areas, choose a partner to help you test your taste buds.

After blindfolding your partner, choose different substances to give as samples. Record your partner's reactions to the different tastes below.

Offer sour, sweet, salty, bland, and bitter substances to taste. Try the different areas of the tongue and the taste bud areas.

NERVOUS SYSTEM
UNIT VII

JOB SHEET #1--TEST REFLEXES OF OTHER STUDENTS

I. Equipment needed--Percussion hammer

II. Procedure

   A. Plantar reflex--Stroke the outer side of the sole of the foot with a blunt instrument from heel to toe

   (NOTE: The normal reaction should be flexion of the great toe. The abnormal reaction would be extension of the great toe with a fanning spread of other toes. This extensor reflex is called the Babinski reflex.)

   B. Ankle jerk--Tap the Achilles tendon with the flat side of the percussion hammer

   (NOTE: The normal reaction should be extension followed by flexion of the ankle. The abnormal reaction would be absent or exaggerated action.)

   C. Knee jerk or patellar reflex--Tap knee just above or below patella

   (NOTE: The normal reaction should be extension of the lower leg. The abnormal reaction would be absent or exaggerated action.)

NERVOUS SYSTEM
UNIT VII

JOB SHEET #2--TEST CRANIAL NERVES

I. Equipment and materials needed

A. Substance for testing sense of smell

B. Snellen eye chart or printed page with varying sizes of letters

C. Pin or other sharp instrument

D. Warm and cold objects, such as a small metal object that can be warmed or cooled

E. Items to taste--Salt, sugar, and something bitter such as quinine

II. Procedure for testing specific nerves

A. Olfactory nerve--Test for smell by closing each side of the nose with finger while testing the other side

B. Optic nerve--Test using eye chart or by reading a printed page of varying size of printed letters

C. Oculomotor nerve--Test by raising upper eyelid and by having person turn eyes from side to side without turning head

(NOTE: Damage to third nerve also may cause blurred or double vision.)

D. Trochlear nerve--Test by having eyes turn up and then turn side to side without moving head

E. Trigeminal nerve

1. Test motor function by asking the person to clench teeth

2. Test sensory function by checking face for reaction to pain and temperature

(NOTE: Injury to one part of the fifth nerve may cause loss of sensation in the cornea and conjunctiva which can be tested only with special equipment.)

F. Abducens nerve--Have person turn eyes from side to side without moving head

(NOTE: There are six muscles which control eye movements. They perform as prime mover and antagonist; that is, when one contracts, its opposite relaxes.)

JOB SHEET #2

G. Facial nerve

1. Test motor function by having person wrinkle forehead, frown, whistle, and close eyelids tightly

2. Test sensory function by having patient taste sugar, salt, and quinine or some other bitter substance

H. Auditory nerve

1. Test hearing function by observing the person's ability to hear a whispered voice

    a. Have person stand fifteen feet from examiner

    b. Have person cover ear closest to examiner with hand to see if examiner's whisper can be heard with the uncovered ear

2. Test equilibrium or balance function by using the past-pointing test

    a. Ask the person to raise arms straight out to the side

    b. Have person touch index fingers together, first with eyes open and then with eyes closed

    (NOTE: Normally, the person should be able to touch the fingers together as well with eyes closed as open.)

I. Glossopharyngeal nerve

1. Test taste on posterior one-third of tongue

2. Test ability to swallow

J. Accessory nerve

1. Test trapezius muscle by having person raise shoulders against resistance by pressure from the examiner's hands

2. Test sternocleidomastoid muscle by having person turn head to right and/to left against resistance of examiner's hands

K. Hypoglossal nerve--Test by having person protrude tongue

(NOTE: Normally, tongue will protrude in the midline.)

NERVOUS SYSTEM
UNIT VII

JOB SHEET #3--MEASURE VISION

I. Equipment needed--Snellen test chart

II. Procedure

(NOTE: The power of vision is usually measured by having the individual read the Snellen test chart. Lines of letters of varying size are printed on the chart and beside each line is given the distance at which it can be read by persons having normal vision.)

A. Have subject being tested sit 6 m (20 ft) from the Snellen chart with eyes at level of 6 m (20 ft) line on chart

B. Cover one eye with disposable card or cup

C. Have subject read the letters as far as possible with the uncovered eye beginning with an upper line and reading down

(NOTE: If the person can read the line marked for vision at twenty feet, he/she has 20/20 vision. If she/he is only able to read the line that can be read by the normal eye at one hundred feet, vision for that eye is 20/100. If he/she can read the line that the normal eye can read at fifteen feet, vision is better than normal, 20/15.)

D. Determine the subject's vision for each eye separately

E. Check for the following possible conditions

1. Emmetropia--Normal vision; objects beyond twenty feet form sharp images on the retina
2. Myopia--Near-sightedness; objects at or beyond twenty feet form sharp images in front of the retina
3. Hyperopia--Far-sightedness; objects at twenty feet form sharp images behind the retina
4. Astigmatism--Visual defect in the shape of the eyeball or lens so that light rays are focused unequally in the two eyes
5. Strabismus--Cross-eye; occurs when the muscles of the eyes do not coordinate so that the eyes do not work together

NERVOUS SYSTEM
UNIT VII

JOB SHEET #4--TEST HEARING

I. Equipment needed--Pocket watch or stop watch

II. Procedure

   A. Have subject close eyes and cover one ear with hand

   B. Hold the watch close to the uncovered ear

   C. Move away gradually

   D. Note the distance at which the watch is no longer heard

   E. Wait a few seconds

   F. Hold watch at a point farther from subject

   G. Move toward the uncovered ear gradually

   H. Note the distance at which the watch is heard

   I. Record your findings

   J. Give a possible explanation for differences noted

   K. Repeat for other ear

NERVOUS SYSTEM
UNIT VII

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with nervous system to the correct definitions by placing appropriate numbers in the blanks provided.

_____a. Basic nerve cell

_____b. Repair, regrowth, or restoration of a part

_____c. Watery fluid found in the ventricles of the cerebrum and surrounding spinal cord

_____d. Study of the nervous system

_____e. Group of cells functioning in reception of stimuli; receiving end of sensory nerves

_____f. Any agent or influence that produces a response or increase in activity in living protoplasm

_____g. Small brain cavity

_____h. Mass of nerve tissue, principally nerve cell bodies, outside the central nervous system

_____i. Bundle of nerve fibers, blood vessels, and connective tissue outside the central nervous system

_____j. Outer layer of cerebrum

_____k. Nerve endings that carry out actions

1. Neurology
2. Neuron
3. Nerve
4. Ganglion
5. Cerebrospinal fluid
6. Ventricle
7. Stimulus
8. Regeneration
9. Affector
10. Effector
11. Cerebral cortex

2. Name functions of the nervous system.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

3. Classify components of different parts of the nervous system by placing a "C" for central nervous system, a "P" for peripheral nervous system, and an "A" for autonomic nervous system in the blanks provided.

_____a. Cranial nerves

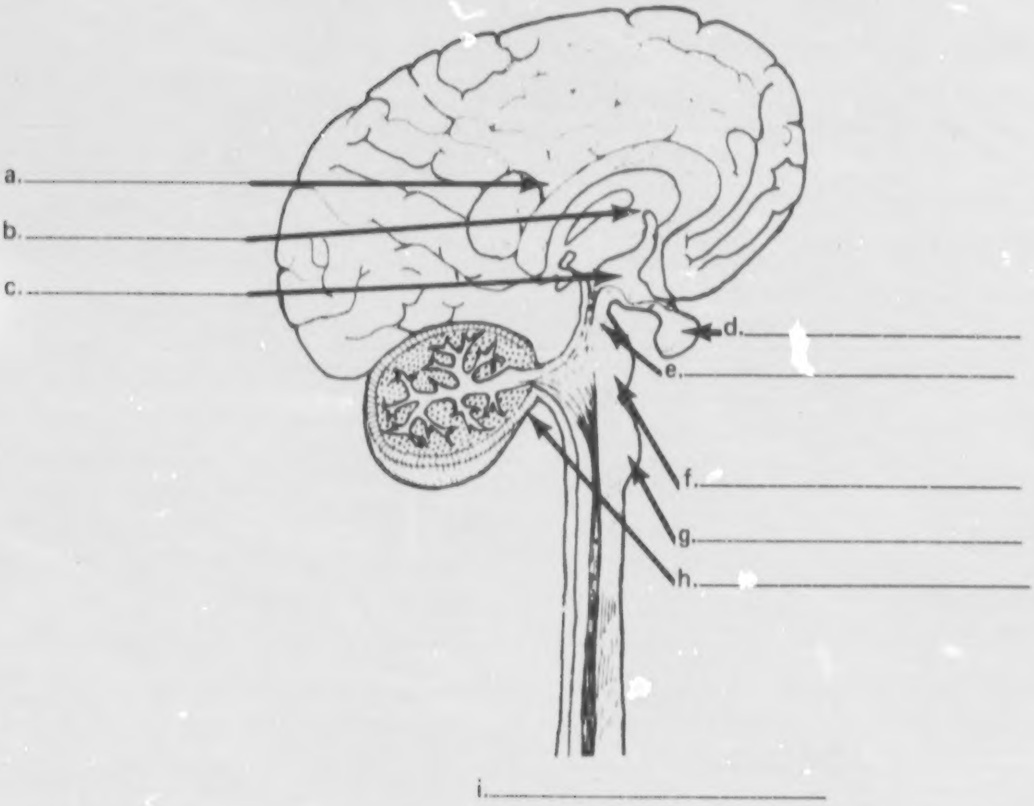
_____b. Involuntary nervous system

_____c. Brain

_____d. Spinal nerves

_____e. Spinal cord

4. Identify main sections of the central nervous system on the diagram below by writing the correct name in the appropriate blank.



5. Match areas of the cerebral cortex to their correct functions by placing the correct number in the appropriate blank.

_____a. Controls higher mental functions

_____b. Receives impulses of heat, cold, touch, pain, and pressure from receptors

_____c. Controls movement of muscles

1. Motor area
2. Sensory area
3. Association area

6. Match parts of the brain to their correct functions.

_____a. Serves as a reflex center

_____b. Controls vision

_____c. Maintains balance, equilibrium, coordination, and muscle tone

_____d. Controls voluntary muscles and judgment

_____e. Controls hearing, smell, and taste

_____f. Controls sensory functions such as pain, touch, and temperature interpretation

_____g. Serves as relay center; monitors sensory stimuli

_____h. Controls body temperature, water balance, sleep, appetite, some emotions such as fear and pleasure, and both divisions of the autonomic nervous system

_____i. Connects the cerebrum and cerebellum

_____j. Controls vital functions such as breathing, heart rate, blood pressure, swallowing, and coughing

1. Cerebellum
2. Pons
3. Hypothalamus
4. Occipital lobe of cerebrum
5. Parietal lobe of cerebrum
6. Medulla
7. Midbrain
8. Thalamus
9. Temporal lobe of cerebrum
10. Frontal lobe of cerebrum

7. Name the functions of the spinal cord.

a. ____

b. ____

8. Describe the protection of the central nervous system.

____

____

____

____

9. Name six ways to maintain the nervous system.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

10. Match the terms associated with the special senses to their correct definitions by placing the appropriate numbers in the blanks provided.

_____a. Study of the eye and its diseases

_____b. Adjustment by the lens to make a sharp, clear image on the retina

_____c. Study of the ear and its diseases

_____d. Pertaining to sense of smell

_____e. General faculty through which conditions outside or inside the body are perceived

_____f. Receptors of taste found in the tongue

_____g. Cavity in the bone in which the eye is located

_____h. Normal orientation of the body in respect to its environment

_____i. Pertaining to the sense of hearing

1. Ophthalmology
2. Otology
3. Sense
4. Orbit
5. Auditory
6. Accommodation
7. Olfactory
8. Taste buds
9. Equilibrium

_____j. Opening in the iris which permits light to enter

_____k. Stirrup-shaped bone of middle ear

_____l. Anvil-shaped bone of middle ear

_____m. Physician who specializes in the treatment of eye disorders

_____n. Hammer-shaped bone of the middle ear

_____o. Waxlike, soft, brown secretion found in the external ear canal; lubricates and protects external canal and tympanum/tympanic membrane

_____p. Within a part

_____q. Outside a part

10. Malleus
11. Incus
12. Stapes
13. Pupil
14. Cerumen
15. Extrinsic
16. Instrinsic
17. Ophthalmologist

11. Name the most important senses.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

12. Match eye and accessory structures to their correct functions by placing the correct number in the appropriate blanks.

_____a. Controls shape of lens to make sharp, clear image

_____b. Controls part of eye muscles

_____c. Clear, transparent part of the sclera on the front of eyeball; allows light through

_____d. Holds lens in place

_____e. Inner layer of nerve tissue made up in part of rods and cones, special light-sensitive cells; receives visual images

1. Cornea
2. Oculomotor nerve
3. Suspensory or ciliary ligament
4. Retina
5. Ciliary muscle

______f. Levators which open and close eyelids

______g. Carries visual impulses from retina to brain

______h. Covers the front of the eyeball; lines the eyelid; aids in keeping the eye moist

______i. Circular muscle; regulates amount of light entering pupil; the pigmented or colored part of the eye

______j. Jelly-like substance filling the eyeball posterior to the lens; maintains shape of eyeball

______k. Circular jelly-like suspension; focuses images on retina

______l. Middle vascular layer on lateral and posterior eyeball; supplies oxygen and nutrients

______m. Outer white layer of firm, connective tissue; covering of eyeball

______n. Space in front of lens between cornea and iris

______o. Space between iris and lens

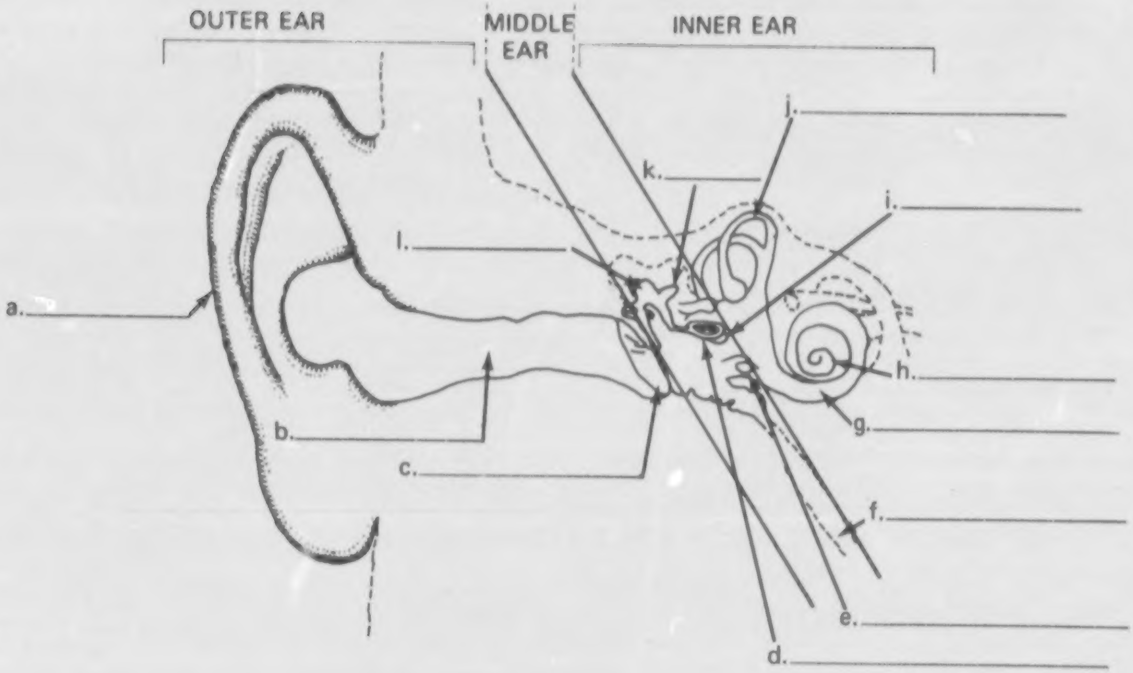
______p. Carries impulses of pain, touch, and temperature from eye and surrounding parts

______q. In upper and lower eyelids at inner edge; carry tears from eye to nasal cavity

______r. Lies superior and lateral to eyeball; secretes tears which moisten and cleanse eye and destroy some bacteria

6. Anterior chamber
7. Optic nerve
8. Vitreous humor
9. Sclera
10. Posterior chamber
11. Lens
12. Iris
13. Conjunctiva
14. Lacrimal gland
15. Lacrimal ducts
16. Eyelid muscles
17. Choroid
18. Ophthalmic nerve

13. Identify the structures of the ear by placing the correct name in the blanks provided.



14. Discuss the sense of taste.

15. Discuss the sense of smell.

16. Discuss care of the eyes.

17. Discuss care of the ears.

18. Describe reaction of taste buds.

19. Demonstrate the ability to:

    a. Test reflexes of other students.

    b. Test cranial nerves.

    c. Measure vision.

    d. Test hearing.

    (NOTE: If the above activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

NERVOUS SYSTEM
UNIT VII

ANSWERS TO TEST

1. a. 2
   b. 8
   c. 5
   d. 1
   e. 9
   f. 7
   g. 6
   h. 4
   i. 3
   j. 11
   k. 10

2. a. Reception of external impressions and information
   b. Coordination of internal messages
   c. Response and readjustment to internal and external stimuli
   d. Storage of information
   e. Coordination of all body activities

3. a. P
   b. A
   c. C
   d. P
   e. C

4. a. Cerebrum
   b. Thalamus
   c. Hypothalamus
   d. Pituitary
   e Midbrain
   f. Pons
   g. Medulla oblongata
   h. Cerebellum
   i. Spinal cord

5. a. 3
   b. 2
   c. 1

6. a. 7
   b. 4
   c. 1
   d. 10
   e. 9
   f. 5
   g. 8
   h. 3
   i. 2
   j. 6

7. a. Conducts impulses to and from the brain

   b. Serves as reflex center to receive and transmit messages through nerve fibers

8. Description should include:

   a. Fluid, membrane, and bones protect fragile nervous tissue

   b. Cranial bones encase the brain

   c. Vertebrae encase the spinal cord

   d. Meninges, a tough membrane, lines cranial bones and vertebrae with three layers of tissue

9. Any six of the following:

   a. Adequate diet with particular attention to vitamins A, B, C, riboflavin, niacin, pyridoxine, proteins, and carbohydrates essential for energy

   b. Avoidance of excessive use of substances which may adversely affect the nervous system

   c. Prompt care of infections and injuries to minimize loss of nerve function

   d. Extra care to prevent further tissue damage in cases of nerve damage with loss of function or sensation

   e. Genetic counseling for parents who are carriers of inherited disorders of the nervous system

   f. Testing of newborn infants for phenylketonuria

   g. Treatment of inherited or congenital defects to the fullest extent possible

   h. Adequate sleep to provide rest for the nervous system

   i. Injections of medicines given in areas where there is minimum chance of contact with nerves

   j. Periods of relaxation

   k. Periods of productive activity

   l. Practice of good mental hygiene

   m. Use of drugs only by physician's orders

10. a. 1
b. 6
c. 2
d. 7
e. 3
f. 8
g. 4
h. 9
i. 5
j. 13
k. 12
l. 11
m. 17
n. 10
o. 14
p. 16
q. 15

11. a. Vision
b. Hearing
c. Taste
d. Smell
e. Hunger and thirst
f. Touch, pressure, heat, cold, and pain
g. Position and balance

12. a. 5
b. 2
c. 1
d. 3
e. 4
f. 16
g. 7
h. 13
i. 12
j. 8
k. 11
l. 17
m. 9
n. 6
o. 10
p. 18
q. 15
r. 14

13. a. Pinna or auricle
b. External auditory canal
c. Tympanic membrane or eardrum
d. Stapes
e. Round window
f. Eustachian tube
g. Vestibule
h. Cochlea
i. Oval window
j. Semicircular canal
k. Incus
l. Malleus

14. Discussion should include:

    a. Taste buds relay impulses to two different nerves which carry the impulses to the brain

    b. Taste buds are stimulated only if substance to be tasted is in solution

    c. Different kinds of taste have separate locations on the tongue

        1. Sweet taste is located near the tip of the tongue

        2. Sour taste is located at the sides of the tongue

        3. Salty taste is located near the tip of the tongue

        4. Bitter taste is located at the back of the tongue

15. Discussion should include:

    a. Sense of smell is closely related to the sense of taste

    b. Receptors are located in the olfactory epithelium in the upper part of the nasal cavity

    c. Olfactory nerve carries smell impulses to the brain

    d. Olfactory nerves tire quickly and become less sensitive after detecting the same odor for a period of time

16. Evaluated to satisfaction of instructor

17. Evaluated to satisfaction of instructor

18. Evaluated to satisfaction of instructor

19. Performance skills evaluated to satisfaction of instructor

DIGESTIVE SYSTEM
UNIT VIII

UNIT OBJECTIVE

After completion of this unit, the student should be able to identify the digestive organs on a diagram and name factors necessary for maintaining the digestive system. The student should also be able to classify enemas according to type and demonstrate the ability to collect a feces or stool specimen, give a cleansing and retention enema, insert a rectal tube and suppository, and remove a fecal impaction. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with the digestive system to their correct definitions.
2. Identify the parts of a tooth and adjacent structures on a diagram.
3. Name the two sets of teeth and how many teeth are included in each set.
4. Match types of teeth to their functions.
5. Name the salivary glands.
6. Identify the liver, pancreas, and adjacent structures on a diagram.
7. Classify functions of the liver, gallbladder, and pancreas.
8. Name in order the stages of digestion.
9. Match sites of food absorption to the types of foods assimilated in each area.
10. Name factors necessary in maintaining the digestive system.
11. Identify the digestive organs on a diagram.
12. Distinguish between alimentary canal organs and accessory organs.
13. Name the structures of the mouth.
14. Select from a list functions of the mouth.
15. Distinguish between functions of the esophagus and stomach.
16. Distinguish between functions of the small and large intestines.

17. Match terms associated with elimination and stool specimen collection to their correct definitions.
18. Name factors which inhibit elimination in the hospital setting.
19. Name health assistant responsibilities related to defecation.
20. Select from a list characteristics to observe about defecation.
21. Name health assistant measures to aid elimination.
22. Classify enemas according to type.
23. Name conditions which may require an ostomy.
24. Distinguish between an ileostomy and a colostomy.
25. Name health assistant responsibilities in assisting the patient to adjust to an ostomy.
26. Select from a list purposes of colostomy irrigations.
27. Match conditions affecting the colon to their correct definitions.
28. Name guidelines for collecting a gastric specimen.
29. Demonstrate the ability to:
    a. Collect a feces or stool specimen.
    b. Give a cleansing enema.
    c. Give a retention enema.
    d. Insert a rectal tube.
    e. Insert a rectal suppository.
    f. Remove a fecal impaction.

DIGESTIVE SYSTEM
UNIT VIII

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

  A. Provide students with objective sheet.

  B. Provide students with information and job sheets.

  C. Discuss unit and specific objectives.

  D. Make transparencies.

  E. Discuss information and job sheets.

  F. Demonstrate procedures outlined in the job sheets.

  G. Observe return demonstrations of procedures on job sheets.

  H. Take field trip to a laboratory to watch tests done on various specimens.

  I. Invite Ostomy Club member to visit.

  J. Show films suggested under additional materials.

  K. Ask members of dental profession to speak to class on good dental care or career opportunities.

  L. Use models to identify digestive organs.

  M. Give test.

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

  C. Transparency masters

    1. TM 1--Structure of a Molar

    2. TM 2--Deciduous Teeth and Permanent Teeth

    3. TM 3--The Salivary Glands

    4. TM 4--Liver, Pancreas, and Adjacent Structures

    5. TM 5--The Digestive Organs

    6. TM 6--Enema Equipment

D. Job sheets

  1. Job Sheet #1--Collect a Feces or Stool Specimen
  2. Job Sheet #2--Give a Cleansing Enema
  3. Job Sheet #3--Give a Retention Enema
  4. Job Sheet #4--Insert a Rectal Tube
  5. Job Sheet #5--Insert a Rectal Suppository
  6. Job Sheet #6--Remove a Fecal Impaction

E. Test

F. Answers to test

III. Unit references:

A. Anthony, Catherine Parker and Alyn, Irene B. *Structure and Function of the Body.* St. Louis, Missouri: C.V. Mosby Company, 1976.

B. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1974.

C. Thompson, Ella M. and Rosdahl, Caroline B. *Textbook of Basic Nursing.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1973.

IV. Additional materials:

A. Films

  1. "The Human Body: Digestive System." Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.
  2. "Exploring the Body--Digestive System." Available to Oklahoma teachers from State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074.

B. Filmstrips

  1. "The Digestive System." Robert J. Brady Company, A Prentice-Hall Co., Bowie, Maryland 20715.
  2. "Colostomy Care." Trainex Corporation, P. O. Box 116, Garden Grove, CA 92642.
  3. "The Cleansing Enema." Trainex Corporation.

DIGESTIVE SYSTEM
UNIT VIII

INFORMATION SHEET

I. Terms and definitions

A. Diaphragm--Muscular membrane that separates the abdominal cavity from the thoracic cavity

B. Fibrinogen--Protein in the blood which aids in clotting

C. Albumin--Simple protein

D. Toxin--Any poisonous substance of microbic, vegetable, mineral, or animal origin

E. Cholesterol--Organic fatlike compound found in animal fat, bile, blood, brain tissue, liver, and other parts of the body

F. Antibody--Protein substance in the blood developed by the body, usually in reaction to a specific foreign substance

G. Feces--Body waste

Examples: Food residue, bacteria, epithelium, and mucus discharged from the intestines

H. Carbohydrates--Starches and sugars

I. Hormone--Chemical substance secreted by endocrine glands which regulates the functions of other organs

J. Gastroenterology--Study of the digestive system

K. Digestion--Physical and chemical breakdown of complex foodstuffs into simpler substances which are absorbed into the blood and lymph systems or eliminated from the body

L. Peristalsis--Rhythmical waves of contraction which move food along the gastrointestinal tract

M. Mucus--Thick, sticky fluid secreted by some membranes and glands

N. Chyme--Nearly liquid mixture of partly digested food and digestive secretions found in the stomach and small intestine

O. Villi--Short, vascular, threadlike projections covering the mucous membrane of the small intestine

P. Sphincter--Ringlike muscle fibers which control an outlet, permitting it to open and close

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INFORMATION SHEET

II. Structure of a tooth (Transparency 1)

- A. Regions
  - 1. Crown
  - 2. Neck
  - 3. Root
- B. Layers
  - 1. Enamel
  - 2. Dentin
  - 3. Pulp cavity
- C. Other structures
  - 1. Cementum
  - 2. Periodontal tissue

III. Sets of teeth (Transparency 2)

- A. Deciduous--20
- B. Permanent--32

IV. Types of teeth (Transparency 2)

(NOTE: Teeth are shaped according to function.)

- A. Incisors--Teeth with thin edges which act as chisels in cutting food
- B. Cuspids--Thin, pointed teeth which tear or shred food; also called canines or eye teeth
- C. Bicuspids--Small, square teeth with irregular surfaces which crush and grind food; also called premolars
- D. Molars--Larger teeth with more surface which crush and grind food

V. Salivary glands (Transparency 3)

- A. Parotid
- B. Sublingual
- C. Submandibular

  (NOTE: These glands secrete 1500 cc saliva daily and begin changing starches to sugar.)

INFORMATION SHEET

VI. Liver, pancreas, and adjacent structures (Transparency 4)

- A. Liver
- B. Hepatic duct
- C. Gallbladder
- D. Cystic duct
- E. Common bile duct
- F. Pancreas
- G. Pancreatic duct
- H. Duodenum

VII. Functions of the liver, gallbladder and pancreas

- A. Liver
    1. Metabolizes carbohydrates, fats, and proteins
    2. Manufactures blood proteins
    3. Removes toxin, bacteria, and worn-out blood cells
    4. Removes waste products from the blood
    5. Manufactures cholesterol
    6. Stores vitamins A, D, K, and B_{12}
    7. Forms antibodies
    8. Stores simple sugars
    9. Manufactures bile which aids in metabolism of fats
- B. Gallbladder--Stores bile until needed for digestion
- C. Pancreas
    1. Produces pancreatin, exocrine secretion which is emptied into the duodenum
    2. Produces insulin, endocrine secretion which aids in carbohydrate metabolism

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INFORMATION SHEET

VIII. Stages of digestion

A. Foods are broken down by mechanical and chemical means into their simplest forms to be absorbed by the blood and used by the cells

(NOTE: Carbohydrates, fats, and proteins are digestible.)

B. Fecal material consisting of undigested foods, bacteria, mucus, and water is eliminated from the alimentary canal

(NOTE: Roughage is indigestible, but is needed to add bulk to the diet and aid in mechanical digestion and elimination.)

IX. Sites of food absorption

A. Stomach--Absorbs alcohol, some drugs, and small amounts of water and glucose

B. Small intestine--Villi absorb approximately ninety percent of nutrients

X. Factors necessary in maintaining the digestive system

A. Proper care of mouth and teeth

B. Adequate diet including food from the basic four food groups

C. Adequate elimination through good elimination habits, proper diet, fluids, and exercise

D. Use of medication only as prescribed

E. Proper handling of foods including cleanliness, refrigeration, and cooking

F. Careful washing of hands before handling or preparing foods and after using toilet

G. Clean source of water

H. Control of flies and other pests

I. Moderate use of spices and other irritating substances to prevent irritation of lining of digestive tract

J. Maintenance of good tone in abdominal muscles by exercise and good posture

INFORMATION SHEET

XI. Digestive organs (Transparency 5)

- A. Oral cavity (mouth)
- B. Sublingual glands
- C. Submandibular glands
- D. Parotid glands
- E. Pharynx
- F. Epiglottis
- G. Esophagus
- H. Stomach
- I. Liver
- J. Gallbladder
- K. Pancreas
- L. Small intestine

  (NOTE: The small intestine is about 2.54 cm [1 in] in diameter, 6.01 m [20 ft] in length and divided into the duodenum, jejunum, and ileum.)

- M. Large intestine
  - 1. Cecum
  - 2. Colon (ascending, transverse, descending)
  - 3. Sigmoid
  - 4. Rectum
  - 5. Anal canal
- N. Appendix

XII. Alimentary canal organs and accessory organs

- A. Alimentary canal organs

  (NOTE: These are organs which are part of the tube extending from the mouth to the rectum.)

  - 1. Oral cavity
  - 2. Pharynx

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INFORMATION SHEET

        3. Esophagus
        4. Stomach
        5. Small intestine
        6. Large intestine

    B. Accessory organs

    (NOTE: These are organs which aid in digestion of food but do not form the digestive tract itself.)

        1. Teeth
        2. Tongue
        3. Salivary glands

        Examples: Parotid, sublingual, submandibular

        4. Epiglottis
        5. Pancreas
        6. Liver
        7. Gallbladder
        8. Appendix

XIII. Structures of the mouth

    A. Tongue
    B. Cheeks
    C. Hard palate
    D. Soft palate
    E. Teeth
    F. Pharynx
    G. Salivary glands

INFORMATION SHEET

XIV. Functions of the mouth

- A. Changes food physically by softening, chewing, and mixing it with saliva
- B. Changes food chemically by beginning digestive process

  Examples: Changes some starches to sugars
- C. Secretes approximately 1500 cc of saliva daily

XV. Functions of the esophagus and stomach

- A. Esophagus

  (NOTE: The esophagus is a tubular passageway for food from mouth to stomach.)

  1. Prevents food from entering trachea
  2. Secretes mucus to aid in food movement
  3. Begins peristalsis
- B. Stomach
  1. Prepares food for digestion by changing it from a solid to a semi-fluid material through peristalsis
  2. Serves as a reservoir for food for the three or four hours needed for proper mixing
  3. Secretes approximately 2000 cc of gastric juice per day
  4. Begins digestion of proteins

XVI. Functions of the small and large intestines

- A. Small intestine
  1. Empties bile from the liver and pancreatic juice into the duodenum
  2. Secretes intestinal juices
  3. Digests and absorbs most food

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INFORMATION SHEET

B. Large intestine

1. Reabsorbs water, mineral salts, and vitamins

2. Provides a site for bacteria which produce vitamin K and other bacteria that aid in absorption

3. Secretes mucus to aid movement of feces

XVII. Terms and definitions associated with elimination and stool specimen collection

A. Defecation--Elimination of waste and undigested food from rectum

B. Distention--State of being stretched out or overfilled

C. Elimination--Ridding of waste

D. Incontinence--Inability to retain urine or feces due to loss of sphincter control

E. Commode--Chair with an open seat to accommodate bedpan or other receptacle for feces and urine

F. Anus--External opening of the rectum

G. Suppository--Semi-solid medicated substance for introduction into the rectum, vagina, or urethra

H. Sphincter--Ringlike muscle surrounding and closing an opening

I. Enema--Introduction of fluid into the rectum and colon

J. Stoma--Artificially created opening between a body cavity and the body's surface to divert feces, urine, or both

K. Ostomy--Surgical operation that creates a new outside opening or stoma

L. Proctoscopy--Examination of the rectum with a special instrument

M. Sigmoidoscopy--Examination of the sigmoid with a special instrument

XVIII. Factors which inhibit elimination in the hospital setting

A. Lack of privacy

B. Limited mobility

C. Immobility due to traction or casts

D. Diet changes

INFORMATION SHEET

E. Medications, such as narcotics or barbiturates

F. Fluid intake

G. Recumbent position for prolonged periods

H. Weakness due to illness or surgery

I. Psychological or emotional stress

XIX. Health assistant responsibilities related to defecation

A. Provide privacy

B. Assist patient with daily elimination needs

C. Provide opportunity for elimination at regular intervals to prevent distention and constipation

D. Establish a routine in an effort to control incontinence

E. Keep a daily record of elimination

F. Assist with keeping intake and output records

G. Observe any abnormalities in urine or feces

H. Collect feces for laboratory examination

I. Assist in determining adequacy of elimination

XX. Characteristics to observe about defecation

A. Number of bowel movements per day

B. Consistency, shape, color, and odor of feces

C. Presence of any unusual matter, such as blood or mucus in feces

D. Expulsion of flatus

E. Symptoms of pain, abdominal distention, or cramping

XXI. Health assistant measures to aid elimination

A. Assuring patient of absolute privacy

B. Positioning patient properly on bedpan

(NOTE: Leaning forward from the hips increases the internal abdominal pressure. If a person must use a bedpan for defecation, place bed in a high Fowler's position.)

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INFORMATION SHEET

C. Offering bedpan at regular intervals

D. Giving bedpan to patient promptly when requested

E. Insuring adequate fluid intake

F. Encouraging patient to eat a well-balanced diet

G. Encouraging patient to move about and assisting with exercise

H. Assisting patient to use commode or toilet if permitted

I. Administration of enemas or suppositories as prescribed

XXII. Types of enemas

A. Nonretention or cleansing

(NOTE: This enema softens and removes feces from the colon and rectum.)

1. Soapsuds

2. Physiologic saline

3. Carminative

(NOTE: These contain an agent that will aid in expelling flatus.)

4. Solutions of salts

B. Retention

(NOTE: This enema injects prescribed lubricants or medications into the colon and or rectum.)

1. Lubricating

2. Anthelmintic

(NOTE: These contain medication to help destroy intestinal parasites.)

3. Emollient

(NOTE: These enemas introduce small amounts of oil or other soothing solutions to protect or soothe irritated mucous membranes.)

4. Medicated

(NOTE: These enemas introduce small amounts of solution containing sedative, anesthesia, or other medications as prescribed.)

INFORMATION SHEET

XXIII. Conditions which may require an ostomy

(NOTE: Ostomy patients may have one or two stomas depending upon the reasons for surgery. The ostomy may be temporary or permanent.)

A. Obstruction of the bowel or ureter

B. Severe inflammation or irritation of the small intestine or colon

C. Traumatic injury of abdominal organs

D. Benign or malignant tumor of the abdomen

E. Fistulas or congenital defects

XXIV. Differences between an ileostomy and a colostomy

A. Ileostomy

1. Usually all the colon has been removed
2. Stoma is usually smaller and is located on the right side
3. Discharge is liquid or semi-liquid
4. Collecting pouch will be needed at all times and will require emptying at three to four hour intervals or more often as needed
5. Stoma is never irrigated
6. Stoma is usually permanent

B. Colostomy

1. Part of the colon has been removed
2. Stoma is usually on the left side of the abdomen
3. After regulation, feces is usually of formed consistency
4. After regulation, the stoma is covered with a small dressing or other device for protection

XXV. Assisting the patient to adjust to an ostomy

A. Accept patient's condition and provide care without showing repugnance or distaste

B. Encourage patient to talk about worries and ask questions

C. Change dressings as often as needed to insure patient's comfort and to avoid odors

D. Avoid dressing changes at mealtime

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INFORMATION SHEET

E. Provide care until patient is ready mentally and physically to assume the responsibility

F. Allow patient to assist when able and instruct as needed

G. Support and encourage the patient and family in adjusting to this extreme change in life-style

(NOTE: Ostomy Club may be notified, with physician's approval, to have a member visit.)

H. Allow patient to determine the time for care as much as possible to allow for adjustment to life-style

I. Encourage a member of the patient's family to receive instruction in care also if possible

J. Suggest avoidance of high-residue foods or foods which cause flatus or diarrhea

XXVI. Purposes of colostomy irrigations

A. Cleansing the colon of fecal material

B. Aiding in establishing regular bowel habits

C. Preventing bowel obstruction

XXVII. Conditions affecting the colon

A. Constipation--Abnormally delayed or infrequent passage of dry, hardened feces

B. Flatus--Gas in the digestive tract

C. Hemorrhoids--Dilated blood vessels in the anal area

D. Polyps--Growths attached to the mucous membranes of the colon

(NOTE: Polyps can occur in the nose, bladder, or uterus.)

E. Diarrhea--Frequent movement of the bowels; increased number of stools per day, often liquid or semi-liquid

F. Colitis--Inflammation of the colon

G. Colostomy--Incision into the colon to form an artificial anus or stoma

H. Ileostomy--Incision into the ileum to form an artificial anus or stoma

I. Fecal impaction--Collection of hardened feces in the rectum and/or sigmoid

INFORMATION SHEET

XXVIII. Guidelines for collecting a gastric specimen

A. Gross examination of vomitus and the manner in which it was vomited is determined, as well as the more detailed laboratory examination

(NOTE: Characteristics of vomitus to observe are color, odor, and consistency.)

B. Specimens may be examined for undigested food, visible or occult blood, organisms, digestive juices, or feces

C. Proper container should be used; avoid overfilling and be sure to label properly

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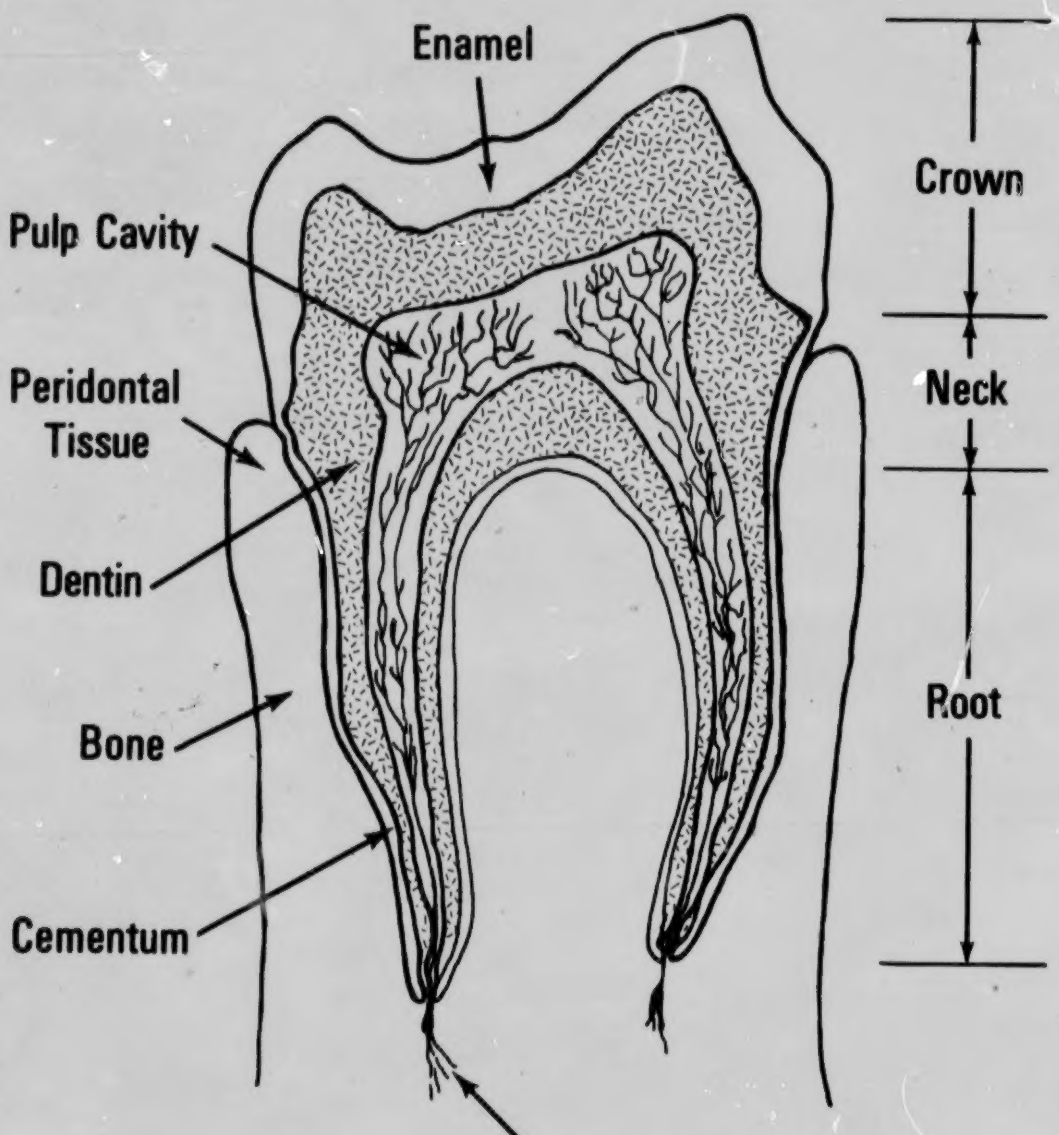
Structure of a Molar



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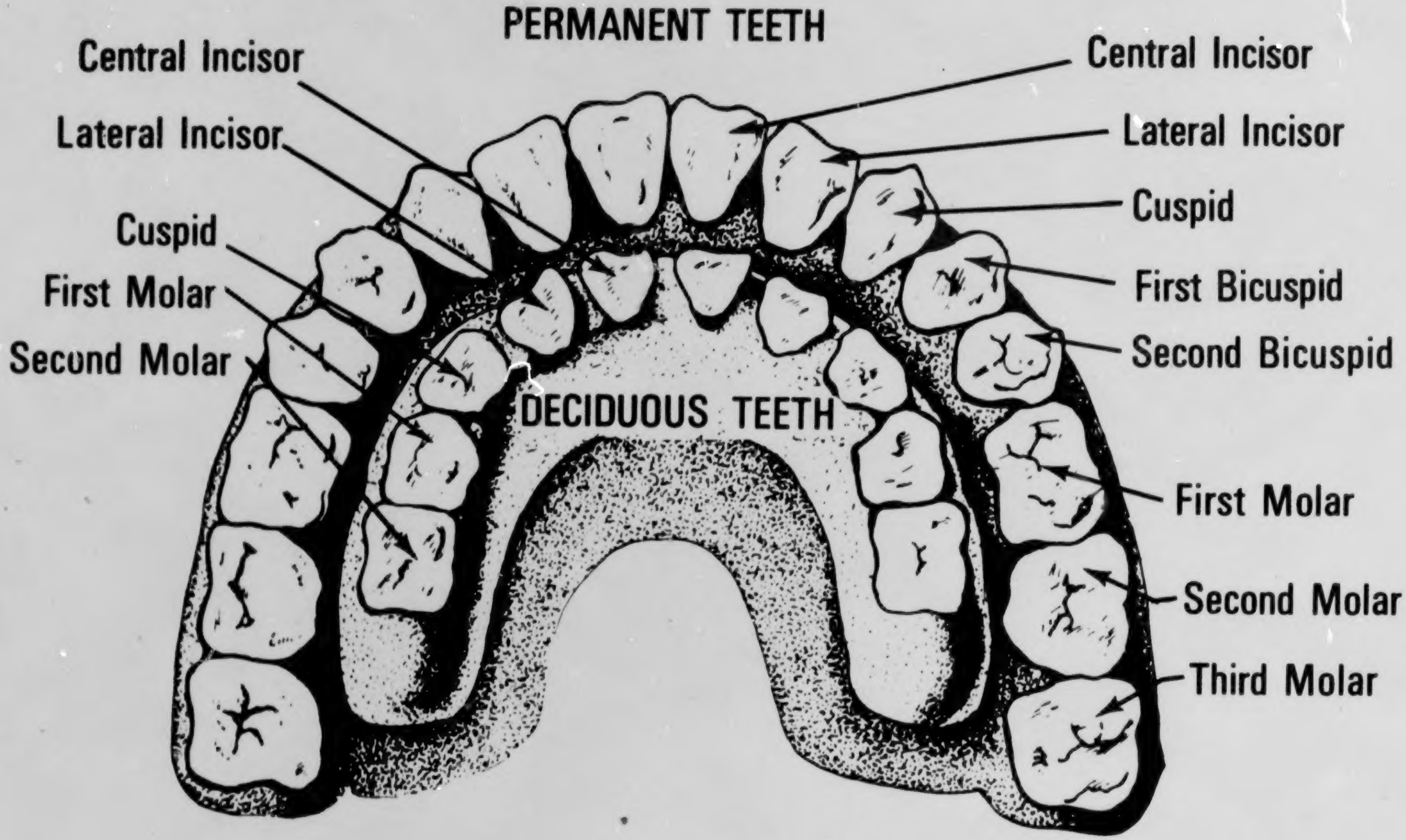
Deciduous Teeth and Permanent Teeth



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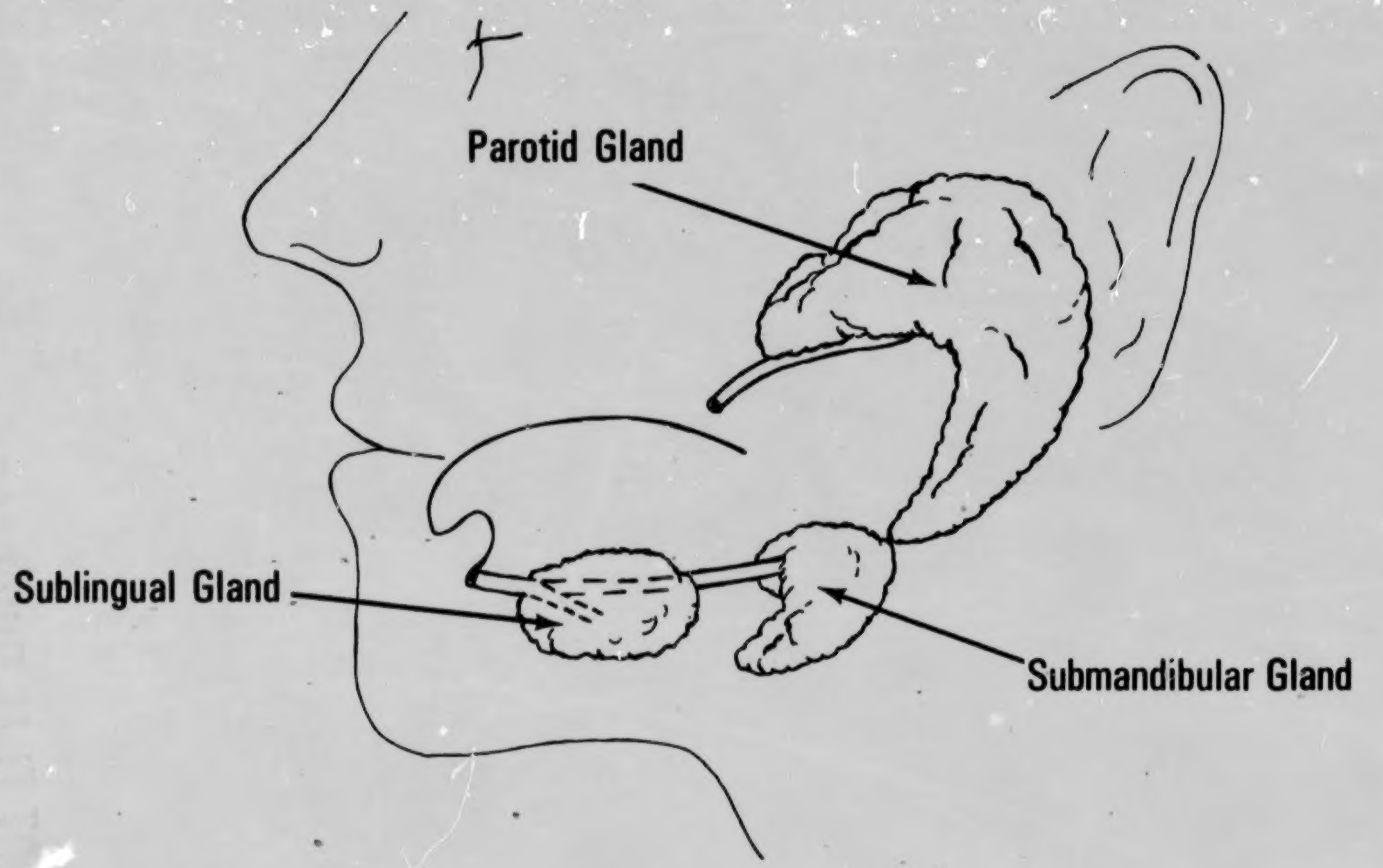
The Salivary Glands



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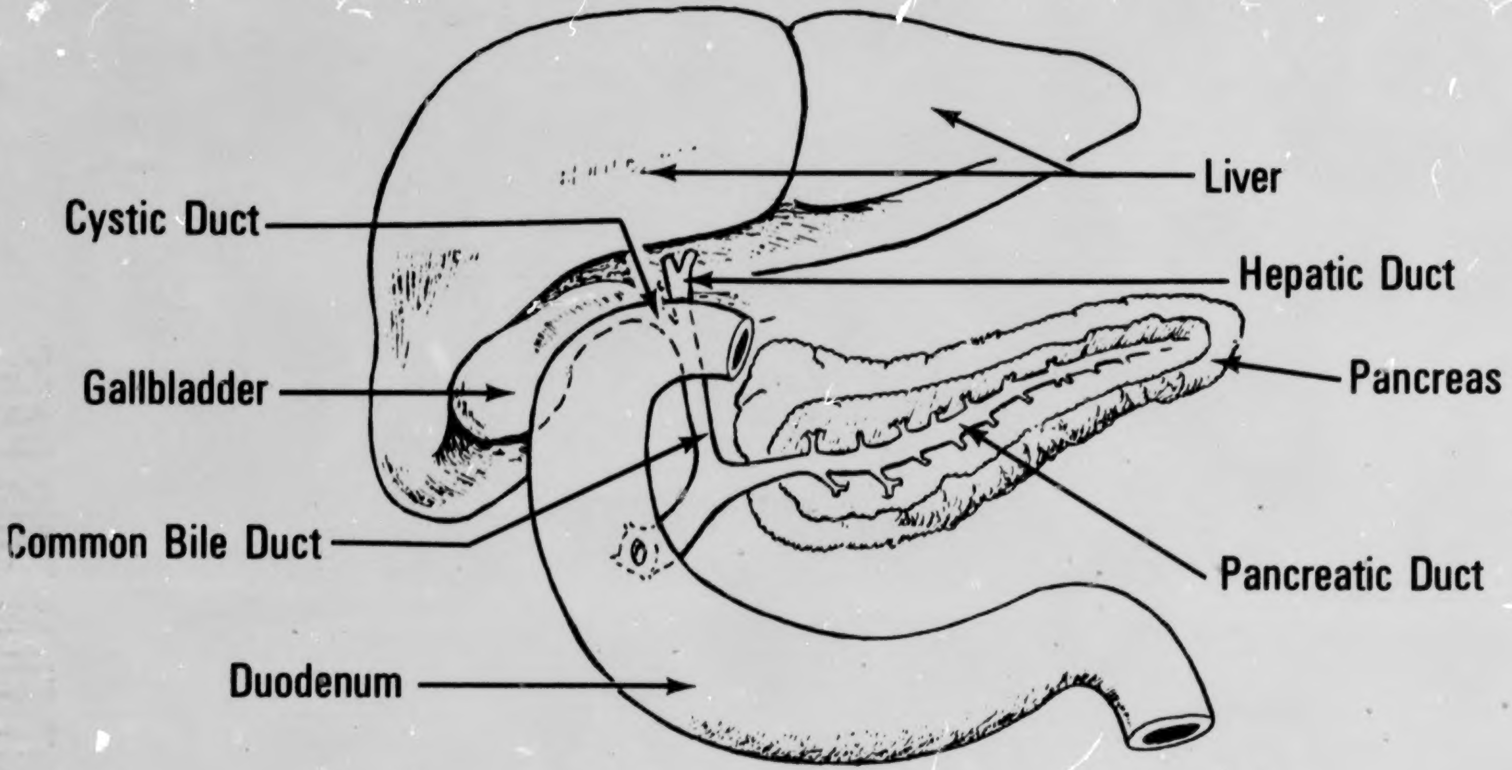
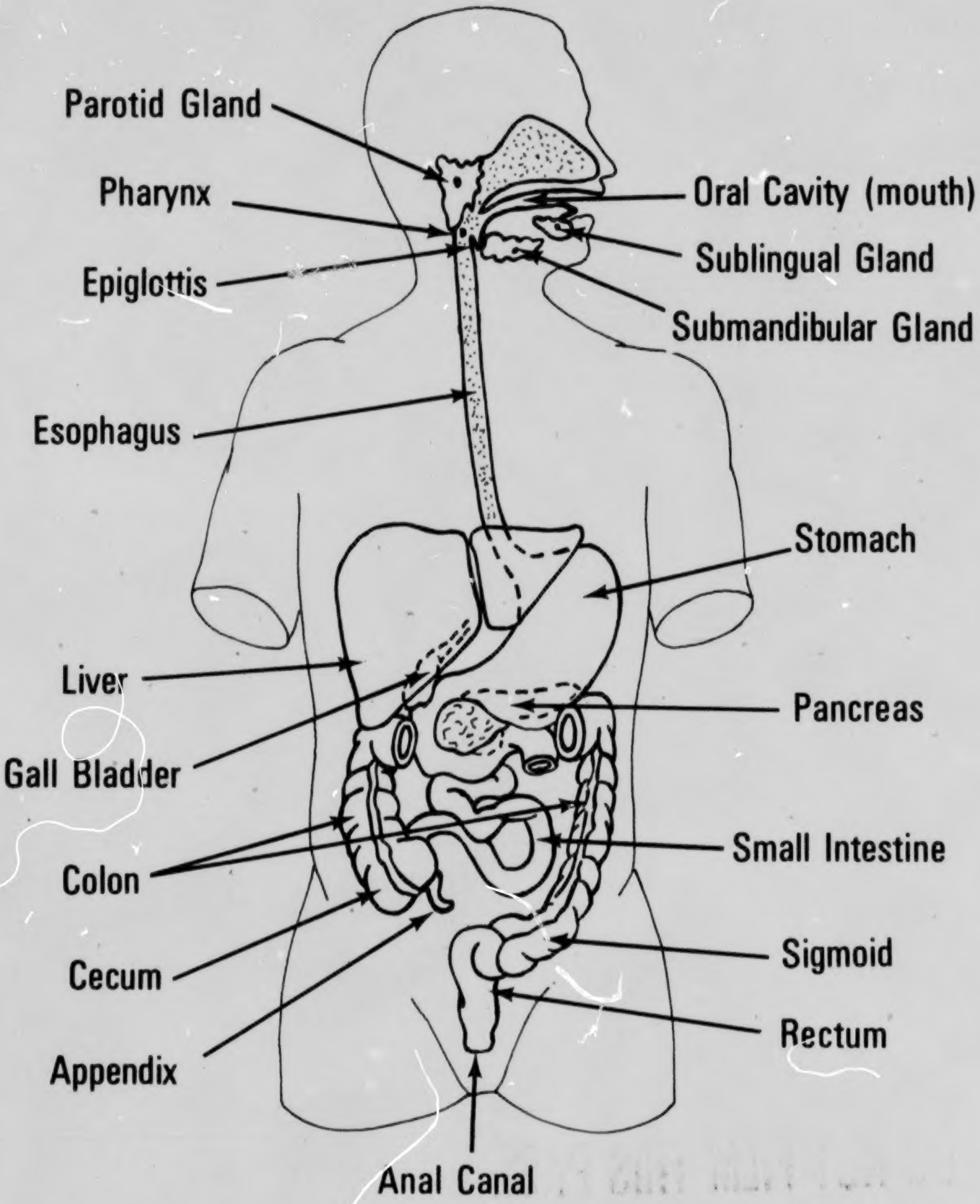
TM 3

HSC - 313-C

Liver, Pancreas, and Adjacent Structures

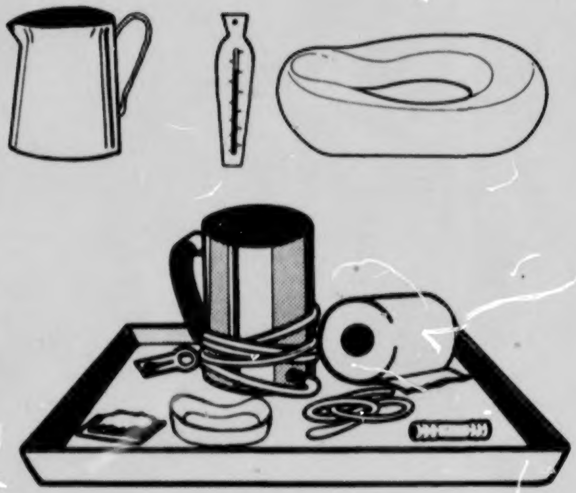


The Digestive Organs

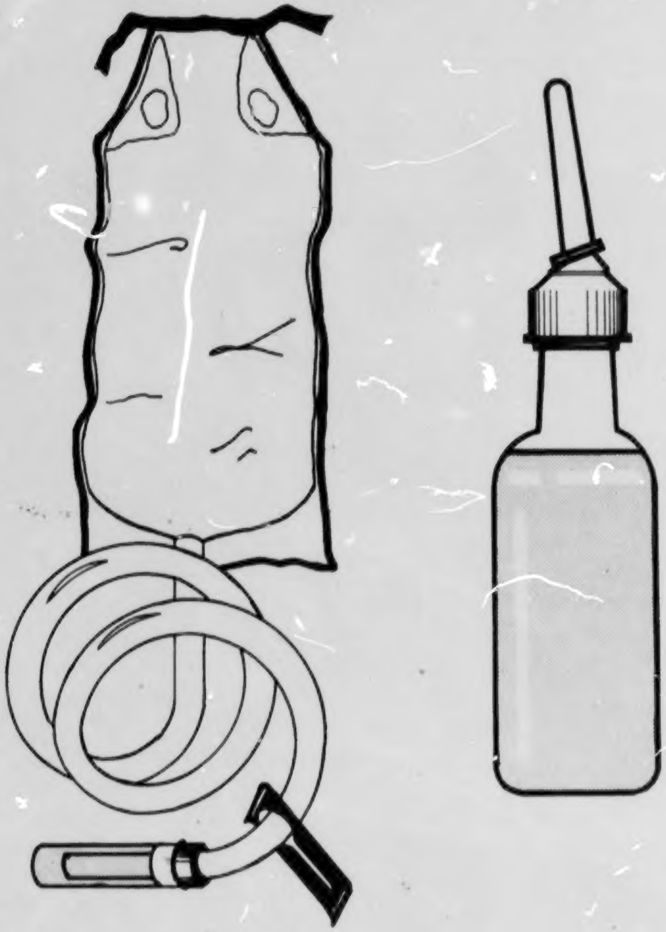


Enema Equipment

Standard



Disposable



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DIGESTIVE SYSTEM
UNIT VIII

JOB SHEET #1--COLLECT A FECES OR STOOL SPECIMEN

I. Equipment needed

  A. Bedpan or commode

  B. Two tongue depressors

  C. Plastic or cardboard container with cover

  D. Paper towel

  E. Label

  F. Laboratory requisition

II. Procedure

  A. Check the physician's orders for specific instructions and reason for collecting specimen

  B. Fill out the label for the container and the laboratory requisition

  C. Wash hands

  D. Inform the patient of the procedure and ask him/her to use the bedpan or commode so the specimen may be obtained

  (NOTE: If the patient is ambulatory, she/he may be allowed to use the bedpan on a nearby chair; in some instances, the bedpan or disposable container may be placed in the toilet just under the toilet seat.)

  E. Take the bedpan to the utility room after obtaining the specimen

  F. Use tongue depressors to place about two tablespoons of the fecal material in the container; cover container

  G. Wrap the soiled tongue depressors in a paper towel and discard

  H. Care for the bedpan in the usual manner

  I. Wash hands

  J. Label and take the specimen to the laboratory promptly

  (NOTE: Specimens are examined for pus, blood, tissue, parasites, and helminths or to determine digestive function; it is best to get the specimen to the laboratory as soon as possible while still warm.)

  K. Report and record the procedure and observations

DIGESTIVE SYSTEM
UNIT VIII

JOB SHEET #2--GIVE A CLEANSING ENEMA

I. Equipment needed (Transparency 6)

   A. Disposable enema bag with tubing and clamp

      (NOTE: Irrigating metal cans are used in some institutions.)

   B. Emesis basin

   C. Lubricant

      (NOTE: Disposable unit contains lubricant.)

   D. Toilet tissue

   E. Bath thermometer

   F. Pitcher or graduate

   G. Solution as prescribed

      (NOTE: Disposable unit contains packet of mild liquid soap.)

   H. Bath blanket

   I. Bed protector

   J. Bedpan with cover

II. Procedure

   A. Wash hands

   B. Assemble equipment

   C. Prepare solution as prescribed

      (NOTE: Solution may be mixed in bag after water is measured and temperature is determined in graduate.)

      (CAUTION: When preparing solution, such as soap suds or physiologic saline solution, temperature of the solution should be 37.2°C [105°F]. Solution given at 43.3°C [110°F] or higher may burn the mucous lining of the intestines.)

   D. Identify patient and explain the procedure

   E. Provide privacy

   F. Replace top covers with bath blanket or cover

JOB SHEET #2

G. Assist patient to turn to LEFT side, if permitted, in Sim's position

H. Place bed protector under patient's buttocks

I. Allow a small amount of solution to flow into the emesis basin or bedpan to expel the air and cooled solution from the tubing; clamp or pinch tubing

J. Lubricate 5.18-7.62 cm (2-3 in) of the tip of the rectal tube, using lubricant on a piece of toilet tissue

K. Separate buttocks and gently insert tip of tube (3-4 inches) into anus

L. Release the tubing, allowing solution to run slowly

(NOTE: Instruct the patient to breathe deeply through the mouth and to tell of any cramping or discomfort that occurs.)

M. Regulate the flow of solution by pinching off the tube momentarily at intervals during the administration

N. Clamp off the tubing when most of the solution has been given or when the patient indicates he/she is unable to take any more

(NOTE: Clamping off the tubing before the last solution runs into it prevents air from reaching the patient.)

O. Withdraw rectal tube slowly; cover with a piece of tissue and place it in emesis basin

P. Assist the patient onto the bedpan

Q. Elevate head of bed, if permitted

R. Place toilet tissue and communication device within patient's reach

S. Remove the equipment; dispose of properly

T. Check the patient frequently

U. Remove the bedpan when the enema and feces have been completely expelled

V. Assist the patient as necessary with cleansing

W. Empty bedpan, observing the results of the enema, the color, amount, and consistency of the feces

X. Wash hands

Y. Assist the patient in handwashing

JOB SHEET #2

Z. Provide for patient's comfort

AA. Wash hands

BB. Report and record procedure and observations

DIGESTIVE SYSTEM
UNIT VIII

JOB SHEET #3--GIVE A RETENTION ENEMA

I. Equipment needed

  A. Solution as prescribed in a small pitcher or graduate

  B. Rectal tube or small catheter

  C. Funnel or Asepto syringe

  D. Bath blanket

  E. Lubricant

  F. Bed protector

  G. Emesis basin

  H. Toilet tissue

I. Procedure

  A. Wash hands

  B. Assemble equipment

  C. Prepare solution

  (NOTE: Temperature of solution should be 37.6°C [100°F] and usually less than 200 cc is given.)

  D. Identify patient and explain procedure

  E. Provide privacy

  F. Replace top covers with bath blanket

  G. Assist patient to turn onto LEFT side

  H. Place protective pad under buttocks

  I. Lubricate 5.18-7.62 cm (2-3 in) of the tip of the rectal tube or catheter

  J. Insert tip of tube 5.18-7.62 cm (2-3 in) into the rectum

  K. Hold the funnel or Asepto syringe 20.32 cm (8 in) or less above the anus

  (NOTE: Holding the funnel lower causes less pressure and aids the patient's ability to retain the solution.)

JOB SHEET #3

L. Keep adding solution until all has been taken

M. Clamp off tubing just before last of solution has been taken

N. Remove the rectal tube slowly, cover with tissue, and place in emesis basin

O. Leave bed protector under patient's buttocks

P. Replace top covers; provide for patient's comfort

Q. Remove, clean, and replace equipment

R. Wash hands

S. Report and record treatment and observations

# DIGESTIVE SYSTEM
UNIT VIII

JOB SHEET #4--INSERT A RECTAL TUBE

I. Equipment needed

   A. Small rectal tube

   B. Lubricant

   C. Toilet tissue

   D. Bed protector

   E. Adhesive tape

   F. Container or paper towels

II. Procedure

   A. Wash hands

   B. Assemble equipment

   C. Identify patient and explain procedure

   D. Provide privacy

   E. Turn patient onto LEFT side; remove top covers sufficiently to expose buttocks

   F. Lubricate tip of rectal tube

   G. Gently insert tube about 7.62-10.16 cm (3-4 in)

   H. Tape in place with adhesive tape if necessary

   I. Place end of tube in container or in folded paper towels in case there is expulsion of fecal material

   J. Leave in place prescribed length of time, usually twenty to thirty minutes

   K. Remove rectal tube; provide for patient's comfort

   L. Clean and return equipment to storage

   M. Wash hands

   N. Report and record treatment and observations

DIGESTIVE SYSTEM
UNIT VIII

JOB SHEET #5--INSERT A RECTAL SUPPOSITORY

I. Equipment needed

- A. Suppository, as prescribed
- B. Lubricant, as needed
- C. Container for suppository
- D. Rectal glove

II. Procedure

- A. Wash hands
- B. Assemble equipment
- C. Identify patient and explain procedure
- D. Provide privacy
- E. Turn patient onto LEFT side and expose buttocks
- F. Put on glove
- G. Insert lubricated suppository, using gloved finger, approximately 6.35-7.62 (2 1/2-3 in) along the wall of the rectum

  (NOTE: If the purpose of the suppository is to induce a bowel movement, the suppository should be retained for twenty minutes or longer; if it is for medication purposes, it is to be retained indefinitely.)
- H. Provide for the patient's comfort
- I. Wash hands
- J. Report and record the procedure and observations

DIGESTIVE SYSTEM
UNIT VIII

JOB SHEET #6--REMOVE A FECAL IMPACTION

I. Equipment needed

   A. Rubber gloves

   B. Lubricant

   C. Toilet tissue

   D. Bedpan with cover

   E. Paper towels

   F. Bed protector

   G. Bath blanket or cover

II. Procedure

   A. Wash hands

   B. Assemble equipment

   C. Identify patient and explain procedure

   (NOTE: This procedure is often very uncomfortable for the patient. Assist in positioning the patient and give reassurance during the procedure as needed.)

   D. Provide privacy

   E. Replace top covers with a bath blanket

   F. Place the patient in Sims' position; place a bed protector under hips

   G. Fold bath blanket back to expose the patient's buttocks

   H. Place the bedpan within convenient reach on the bed or on a chair at the bedside

   I. Put on the gloves; lubricate well the index finger of one glove

   J. Insert lubricated finger gently into the anus, following the curve of the rectal wall, to examine for presence of impaction and its consistency

   K. Break off a small piece of fecal material and gently remove it, using the examining finger, placing material in the bedpan

JOB SHEET #6

L. Continue removing as much fecal material as can be reached with the finger or until the patient's discomfort warrants discontinuing the procedure

M. Remove soiled gloves and place in paper towels

N. Give retention enema, if prescribed

O. Place patient on bedpan to complete defecation, if needed

P. Wash and dry the patient's anal area; remove the bed protector and replace the top covers

Q. Provide for the patient's comfort; place the communication device conveniently

R. Clean the equipment and return to storage

S. Wash hands

T. Report and record the procedure and observations

DIGESTIVE SYSTEM
UNIT VIII

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with digestive systems to their correct definitions. Place appropriate numbers in the blanks provided.

_____a. Starches and sugars

_____b. Thick, sticky fluid secreted by some membranes and glands

_____c. Simple protein

_____d. Body waste

_____e. Organic fatlike compound found in animal fat, bile, blood, brain tissue, liver, and other parts of the body

_____f. Protein in blood which aids in clotting

_____g. Short, vascular, threadlike projections covering mucous membrane of small intestine

_____h. Muscular membrane that separates abdominal cavity from thoracic cavity

_____i. Any poisonous substance of microbic, vegetable, mineral, or animal origin

_____j. Protein substance in the blood developed by the body, usually in reaction to a specific foreign substance

_____k. Chemical substance secreted by endocrine gland which regulates functions of other organs

_____l. Ringlike muscle fibers which control an outlet, permitting it to open and close

_____m. Study of digestive system

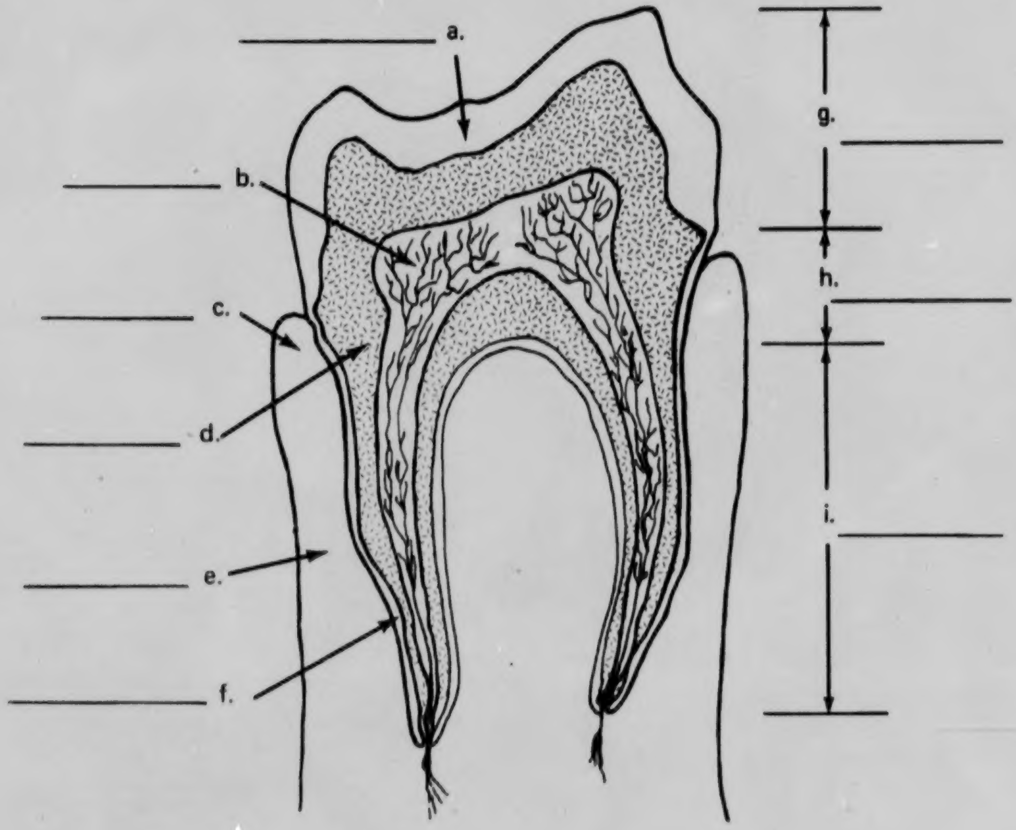
1. Diaphragm
2. Fibrinogen
3. Albumin
4. Toxin
5. Cholesterol
6. Antibody
7. Feces
8. Carbohydrates
9. Hormone
10. Gastroenterology
11. Digestion
12. Peristalsis
13. Mucus
14. Chyme
15. Villi
16. Sphincter

______n. Rhythmical waves of contraction which move food along the gastrointestinal tract

______o. Physical and chemical breakdown of complex foodstuffs into simpler substances which are absorbed into blood and lymph systems or eliminated from body

______p. Nearly liquid mixture of partly digested food and digestive secretions found in stomach and small intestine

2. Identify the parts of a tooth and adjacent structures by writing the correct names in the blanks provided.



3. Name the two sets of teeth and how many teeth are included in each set.

a. ______________________________

b. ______________________________

4. Match types of teeth to their functions. Place the appropriate numbers in the blanks provided.

_____a. Thin, pointed teeth which tear or shred food; also called canines or eye teeth

_____b. Larger teeth with more surface which crush and grind food

_____c. Teeth with thin edges which act as chisels in cutting food

_____d. Small, square teeth with irregular surfaces which crush and grind food; also called premolars

1. Incisors
2. Cuspids
3. Bicuspids
4. Molars

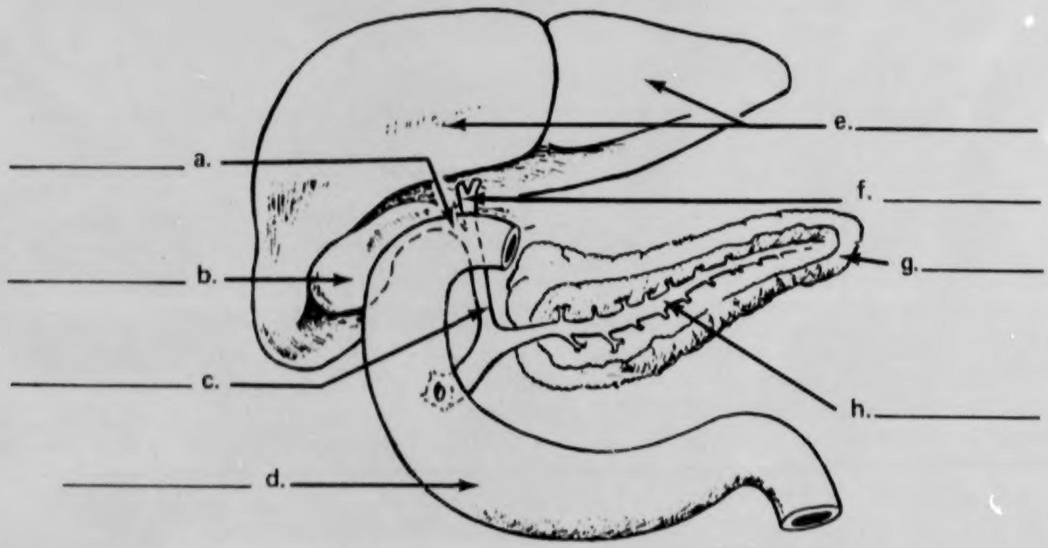
5. Name the salivary glands.

a. ______________________________

b. ______________________________

c. ______________________________

6. Identify the liver, pancreas, and adjacent structures on the diagram by writing the correct name in the blanks provided.



7. Classify the functions of the liver, gallbladder, and pancreas. Place an "L" for liver functions, a "G" for gallbladder functions, and a "P" for pancreas functions in the blanks provided.

_____a. Stores bile until needed for digestion

_____b. Forms antibodies

_____c. Manufactures blood proteins

_____d. Produces insulin, endocrine secretion which aids in carbohydrate metabolism

_____e. Stores simple sugars

_____f. Metabolizes carbohydrates, fats, and proteins

_____g. Removes toxin, bacteria, and worn-out blood cells

_____h. Manufactures bile which aids in metabolism of fats

_____i. Stores vitamins A, D, K, B_{12}

_____j. Manufactures cholesterol

_____k. Removes waste products from blood

_____l. Produces pancreatin, exocrine secretion which is emptied into duodenum

8. Name in order the stages of digestion.

a. ____

____

b. ____

____

9. Match sites of food absorption on the right to types of food assimilated in each area. Place the correct numbers in the blanks provided. An answer may be used more than once.

_____a. Absorbs alcohol

_____b. Absorbs small amounts of water and glucose

_____c. Villi absorb approximately ninety percent of nutrients

_____d. Absorbs some drugs

1. Stomach
2. Small intestine

10. Name factors necessary in maintaining the digestive system.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

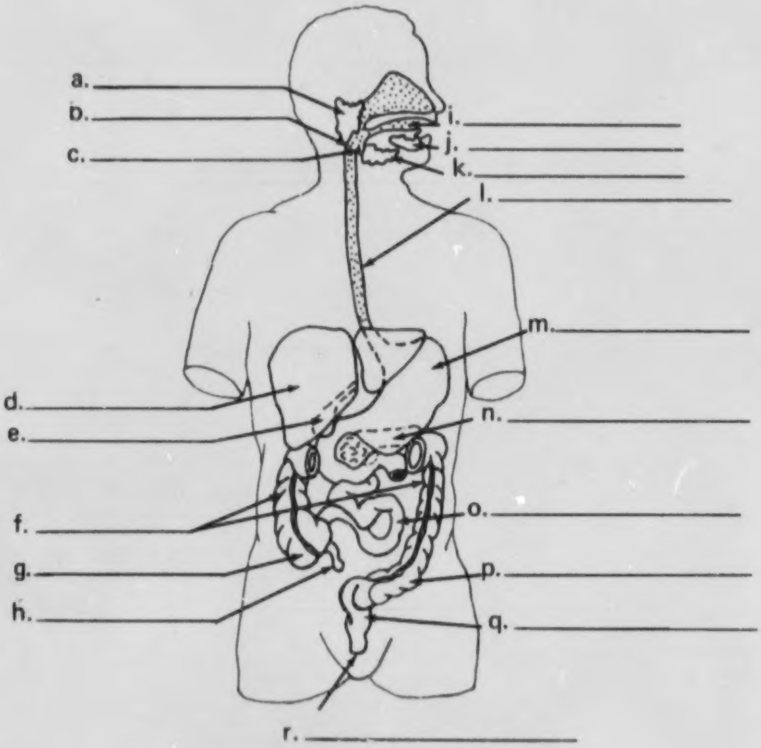
g. ______________________________

h. ______________________________

i. ______________________________

j. ______________________________

11. Identify digestive organs on the following diagram by writing the correct names in the blanks provided.



12. Distinguish between alimentary canal organs and accessory organs. Place an "AL" for alimentary canal organs and "AC" for accessory organs in the blanks provided.

______a. Gallbladder

______b. Teeth

______c. Small intestine

______d. Pancreas

______e. Oral cavity

______f. Stomach

______g. Appendix

______h. Large intestine

______i. Esophagus

______j. Tongue

______k. Salivary glands

______l. Epiglottis

______m Liver

______n. Pharynx

13. Name the structures of the mouth.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

14. Select from the list below functions of the mouth. Place an "X" in the appropriate blanks.

______a. Changes starches to lactose

______b. Secretes gastric juices

_____c. Changes food physically by softening, chewing, and mixing it with saliva

_____d. Changes food chemically by beginning digestive process

15. Distinguish between functions of esophagus and stomach. Place an "E" for the esophagus functions and an "S" for stomach functions in the blanks provided.

_____a. Begins digestion of proteins

_____b. Serves as reservoir for food for the three to four hours needed for proper mixing

_____c. Begins peristalsis

_____d. Secretes mucus to aid in food movement

_____e. Secretes approximately 2000 cc of gastric juice per day

_____f. Prevents food from entering trachea

_____g. Prepares food for digestion by changing it from a solid to a semi-fluid material through peristalsis

16. Distinguish between functions of small and large intestines. Place an "S" for small intestine functions and an "L" for large intestine functions in the blanks provided.

_____a. Empties bile from the liver and pancreatic juice into duodenum

_____b. Secretes mucus to aid in movement of feces

_____c. Secretes intestinal juices

_____d. Digests and absorbs most food

_____e. Reabsorbs water, mineral salts, and vitamins

_____f. Provides a site for bacteria to produce vitamin K and other bacteria that aid in absorption

17. Match terms associated with elimination and stool specimen collection to their correct definitions. Place the appropriate numbers in the blanks provided.

______a. Ringlike muscle surrounding and closing an opening

______b. Ridding of waste

______c. Examination of the rectum with special instrument

______d. Introduction of fluid into rectum and colon

______e. Elimination of waste and undigested food from rectum

______f. External opening of rectum

______g. Examination of sigmoid with special instrument

______h. State of being stretched out or overfilled

______i. Chair with an open seat to accommodate bedpan or other receptacle for feces and urine

______j. Semi-solid medicated substance for introduction into rectum, vagina, or urethra

______k. Artificially created opening between body cavity and body's surface to divert feces, urine, or both

______l. Surgical operation that creates new outside opening or stoma

______m. Inability to retain urine or feces due to loss of sphincter control

1. Defecation
2. Distention
3. Elimination
4. Incontinence
5. Commode
6. Anus
7. Suppository
8. Sphincter
9. Enema
10. Stoma
11. Ostomy
12. Proctoscopy
13. Sigmoidoscopy

18. Name five factors which inhibit elimination in hospital setting.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

19. Name five health assistant responsibilities related to defecation.

    a. ______________________________

    b. ______________________________

    c. ______________________________

    d. ______________________________

    e. ______________________________

20. Select from the list below characteristics to observe about defecation. Place an "X" in the appropriate blanks.

    ______a. Diet changes

    ______b. Expulsion of flatus

    ______c. Consistency, shape, color, and odor of feces

    ______d. Fluid intake

    ______e. Presence of any unusual matter such as blood or mucus in feces

    ______f. Number of bowel movements per day

    ______g. Type of privacy

    ______h. Symptoms of pain, abdominal distention, or cramping

21. Name five health assistant measures to aid elimination.

    a. ______________________________

    b. ______________________________

    c. ______________________________

    d. ______________________________

    e. ______________________________

22. Classify types of enemas by placing an "NR" for the nonretention or cleansing materials and an "R" for retention materials in the blanks provided.

    ______a. Physiologic saline

    ______b. Solution of salts

    ______c. Emollient

    ______d. Medicated

    ______e. Soapsuds

    ______f. Carminative

    ______g. Lubricating

    ______h. Anthelmintic

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23. Name three conditions which may require an ostomy.

a. ______________________________

b. ______________________________

c. ______________________________

24. Distinguish between an ileostomy and a colostomy by placing an "I" for characteristics of an ileostomy and a "C" for characteristics of a colostomy in the blanks provided.

______a. After regulation, feces is usually of formed consistency

______b. Stoma is usually on the left side of the abdomen

______c. Stoma is usually smaller and is located on the right side

______d. Stoma is usually permanent

______e. Part of the colon has been removed

______f. Discharge is liquid or semi-liquid

______g. Stoma is never irrigated

______h. Usually all the colon has been removed

______i. Collecting pouch will be needed at all times and will require emptying at three to four hour intervals or more often as needed

______j. After regulation, the stoma is covered with small dressing or other device for protection

25. Name five health assistant responsibilities in assisting the patient to adjust to an ostomy.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

26. Select from a list purposes of colostomy irrigations. Place an "X" in the appropriate blanks.

    ______a. Preventing infection

    ______b. Aiding in establishing regular bowel habits

    ______c. Sealing off the stoma to prevent leakage

    ______d. Preventing bowel obstruction

    ______e. Cleansing the colon of fecal material

27. Match conditions affecting the colon to their correct definitions. Place appropriate numbers in the blanks provided.

    ______a. Incision into the ileum to form an artificial anus or stoma

    ______b. Dilated blood vessels in anal area

    ______c. Frequent movement of bowels; increased number of stools per day, often liquid or semi-liquid

    ______d. Abnormally delayed or infrequent passage of dry, hardened feces

    ______e. Collection of hardened feces in the rectum and/or sigmoid

    ______f. Inflammation of colon

    ______g. Gas in digestive tract

    ______h. Growths attached to the mucous membranes of the colon

    ______i. Incision into the colon to form an artificial anus or stoma

    1. Constipation
    2. Flatus
    3. Hemorrhoids
    4. Polyps
    5. Diarrhea
    6. Colitis
    7. Colostomy
    8. Ileostomy
    9. Fecal impaction

28. Name guidelines for collecting a gastric specimen.

    a. ____

    ____

    b. ____

    ____

    c. ____

    ____

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29. Demonstrate the ability to:

    a. Collect a feces or stool specimen.

    b. Give a cleansing enema.

    c. Give a retention enema.

    d. Insert a rectal tube.

    e. Insert a rectal suppository.

    f. Remove a fecal impaction.

    (NOTE: If the above activities have not been accomplished prior to the test, ask the instructor when they should be accomplished.)

DIGESTIVE SYSTEM
UNIT VIII

ANSWERS TO TEST

1. a. 8
   b. 13
   c. 3
   d. 7
   e. 5
   f. 2
   g. 15
   h. 1
   i. 4
   j. 6
   k. 9
   l. 16
   m. 10
   n. 12
   o. 11
   p. 14
2. a. Enamel
   b. Pulp cavity
   c. Periodontal tissue
   d. Dentin
   e. Bone
   f. Cementum
   g. Crown
   h. Neck
   i. Root
3. a. Deciduous--20
   b. Permanent--32
4. a. 2
   b. 4
   c. 1
   d. 3
5. a. Parotid
   b. Sublingual
   c. Submandibular

6. a. Cystic duct
   b. Gallbladder
   c. Common bile duct
   d. Duodenum
   e. Liver
   f. Hepatic duct
   g. Pancreas
   h. Pancreatic duct

7. a. G
   b. L
   c. L
   d. P
   e. L
   f. L
   g. L
   h. L
   i. L
   j. L
   k. L
   l. P

8. a. Foods are broken down by mechanical and chemical means into their simplest forms to be absorbed by the blood and used by the cells

   b. Fecal material consisting of undigested foods, bacteria, mucus, and water is eliminated from the alimentary canal

9. a. 1
   b. 1
   c. 2
   d. 1

10. a. Proper care of mouth and teeth

    b. Adequate diet including food from the basic four food groups

    c. Adequate elimination through good elimination habits, proper diet, fluids, and exercise

    d. Use of medication only as prescribed

    e. Proper handling of foods including cleanliness, refrigeration, and cooking

f. Careful washing of hands before handling or preparing foods and after using toilet

g. Clean source of water

h. Control of flies and other pests

i. Moderate use of spices and other irritating substances to prevent irritation of lining of digestive tract

j. Maintenance of good tone in abdominal muscles by exercise and good posture

11. a. Parotid gland

b. Pharynx

c. Epiglottis

d. Liver

e. Gallbladder

f. Colon

g. Cecum

h. Appendix

i. Oral cavity (mouth)

j. Sublingual gland

k. Submandibular gland

l. Esophagus

m. Stomach

n. Pancreas

o. Small intestine

p. Sigmoid

q Rectum

r. Anal canal

12. a. AC
b. AC
c. AL
d. AC
e. AL
f. AL
g. AC
h. AL
i. AL
j. AC
k. AC
l. AC
m. AC
n. AL

13. a. Tongue
b. Cheeks
c. Hard palate
d. Soft palate
e. Teeth
f. Pharynx
g. Salivary glands

14. c, d

15. a. S
b. S
c. E
d. E
e. S
f. E
g. S

16. a. S
b. L
c. S
d. S
e. L
f. L

17. a. 8
b. 3
c. 12
d. 9
e. 1
f. 6
g. 13
h. 2
i. 5
j. 7
k. 10
l. 11
m. 4

18. Any five of the following:
    - a. Lack of privacy
    - b. Limited mobility
    - c. Immobility due to traction or casts
    - d. Diet changes
    - e. Medications such as narcotics or barbiturates
    - f. Fluid intake
    - g. Recumbent position for prolonged periods
    - h. Weakness due to illness or surgery
    - i. Psychological or emotional stress

19. Any five of the following:
    - a. Provide privacy
    - b. Assist patient with daily elimination needs
    - c. Provide opportunity for elimination at regular intervals to prevent distention and constipation
    - d. Establish a routine in an effort to control incontinence
    - e. Keep a daily record of elimination
    - f. Assist with keeping intake and output records
    - g. Observe any abnormalities in urine or feces
    - h. Collect feces for laboratory examination
    - i. Assist in determining adequacy of elimination

20. b, c, e, f, h

21. Any five of the following:
    - a. Assuring patient of absolute privacy
    - b. Positioning patient properly on bedpan
    - c. Offering bedpan at regular intervals
    - d. Giving bedpan to patient promptly when requested
    - e. Insuring adequate fluid intake
    - f. Encouraging patient to eat a well-balanced diet

g. Encouraging patient to move about and assisting with exercise

h. Assisting patient to use commode or toilet if permitted

i. Administration of enemas or suppositories as prescribed

22. a. NR
b. NR
c. R
d. R
e. NR
f. NR
g. R
h. R

23. Any three of the following:

a. Obstruction of the bowel or ureter

b. Severe inflammation or irritation of the small intestine or colon

c. Traumatic injury of abdominal organs

d. Benign or malignant tumor of the abdomen

e. Fistulas or congenital defects

24. a. C
b. C
c. I
d. I
e. C
f. I
g. I
h. I
i. I
j. C

25. Any five of the following:

a. Accept patient's condition and provide care without showing repugnance or distaste

b. Encourage patient to talk about worries and ask questions

c. Change dressings as often as needed to insure patient's comfort and to avoid odors

d. Avoid dressing changes at mealtimes

e. Provide care until patient is ready mentally and physically to assume the responsibility

f. Allow patient to assist when able and instruct as needed

g. Support and encourage the patient and family in adjusting to this extreme change in life-style

h. Allow patient to determine the time for care as much as possible to allow for adjustment to life-style

i. Encourage a member of the patient's family to receive instruction in care also if possible

j. Suggest avoidance of high-residue foods which cause flatus or diarrhea

26. b, d, e

27. a. 8
    b. 3
    c. 5
    d. 1
    e. 9
    f. 6
    g. 2
    h. 4
    i. 7

28. a. Gross examination of vomitus and the manner in which it was vomited is determined, as well as the more detailed laboratory examination

    b. Specimens may be examined for undigested food, visible or occult blood, organisms, digestive juices, or feces

    c. Proper container should be used; avoid overfilling and be sure to label properly

29. Performance skills evaluated to satisfaction of instructor

CIRCULATORY SYSTEM
UNIT IX

UNIT OBJECTIVE

After completion of this unit, the student should be able to identify structures of the heart, name major veins and arteries, and name the four blood groups. The student should also be able to apply the different forms of heat and cold. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with the circulatory system to their correct definitions.
2. Select from a list functions of the circulatory system.
3. Identify structures of the heart on a diagram.
4. Identify major arteries and veins on diagrams.
5. Name major blood vessels of the head.
6. Name ways to help prevent heart and circulatory ailments.
7. Match terms associated with the blood to their correct definitions.
8. Name the general functions of blood.
9. Select from a list principal components of blood plasma.
10. Classify characteristics of blood cells.
11. Select from a list reasons for blood transfusions.
12. Name the four blood groups.
13. Discuss the Rh factor.
14. Match routine blood studies to their correct descriptions.
15. Name less common blood tests done for more specific diagnoses.
16. Match normal ranges of blood tests in adults to their correct values.
17. Match terms associated with heat and cold to their correct definitions.
18. Distinguish between local effects of heat and cold.

19. Distinguish between systemic effects of heat and cold.
20. Distinguish between forms of heat.
21. Distinguish between forms of cold.
22. Demonstrate the ability to:
    a. Use a warm water bottle.
    b. Use an electric heating pad.
    c. Administer a chemical hot pack.
    d. Use a heat lamp.
    e. Use a heat cradle.
    f. Apply warm, wet compresses.
    g. Assist with sitz bath.
    h. Use an ice bag or ice collar.
    i. Apply a chemical cold pack.
    j. Apply cold, moist packs.
    k. Give a cool or tepid sponge bath.

CIRCULATORY SYSTEM
UNIT IX

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information and job sheets.

   F. Invite resource person to visit class or HOSA chapter meetings to speak on career opportunities in the laboratory science fields.

   G. Have laboratory or other qualified health personnel demonstrate blood typing.

   H. Obtain information from the Heart Association to supplement material on circulatory problems or maintaining a healthy heart.

   I. Provide equipment and time to complete job sheets.

   J. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Structure of the Heart

      2. TM 2--Principal Veins

      3. TM 3--Principal Arteries

      4. TM 4--The Lymphatic Structures

   D. Job sheets

      1. Job Sheet #1--Use A Warm Water Bottle

      2. Job Sheet #2--Use An Electric Heating Pad

      3. Job Sheet #3--Administer A Chemical Hot Pack

4. Job Sheet #4--Use A Heat Lamp
5. Job Sheet #5--Use A Heat Cradle
6. Job Sheet #6--Apply Warm, Wet Compresses
7. Job Sheet #7--Assist With Sitz Bath
8. Job Sheet #8--Use An Ice Bag Or Ice Collar
9. Job Sheet #9--Apply A Chemical Cold Pack
10. Job Sheet #10--Apply Cold, Moist Packs
11. Job Sheet #11--Give A Cool Or Tepid Sponge Bath

III. Unit references:

A. Anthony, Catherine P. *Structure and Function of the Body*. St. Louis, Missouri: The C. V. Mosby Company, 1976.

B. Rogers, Helen. *Nursing I: A Course of Study*. Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

C. Thompson, Ella M. and Rosdahl, Caroline B. *Textbook of Basic Nursing*. Philadelphia, Pennsylvania: J.B. Lippincott Company, 1973.

IV. Additional materials:

A. Films:

1. "The Blood." Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.
2. "I Am Joe's Heart." Pyramid Films, 2801 Colorado Avenue, Santa Monica, CA 90404.*
3. "Heart and Circulatory Systems." Films Incorporated, 1144 Wilmette Avenue, Wilmette, IL 60091.*

B. Filmstrip--"Local Applications of Heat and Cold." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

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*Also available to Oklahoma teachers from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 W. Sixth Avenue, Stillwater, Oklahoma 74074.

CIRCULATORY SYSTEM
UNIT IX

INFORMATION SHEET

I. Terms and definitions

A. Cardiac--Pertaining to the heart

B. Cardiology--Study of the heart

C. Endocardium--Smooth layer of cells that lines inside of heart and forms valves

D. Myocardium--Middle layer of heart muscles; also thickest layer

E. Pericardium--Double membrane that covers the heart and secretes fluid which provides lubrication preventing friction during heart action

F. Atrium--Upper chamber or compartment of heart; there are two, one on each side

(NOTE: Right atrium receives venous blood as it returns from the body; left atrium receives blood from the right atrium and pumps it into lungs.)

G. Ventricle--Lower pumping chamber of heart; there are two, one on each side

(NOTE: Right ventricle is a thick walled space that receives blood from the right atrium and pumps it into the lungs; left ventricle receives blood from the left atrium and pumps it to the rest of the body through the arteries.)

H. Vein--Blood vessel that carries blood to the heart

(NOTE: Veins are less muscular vessels than arteries and are equipped with one-way valves that permit blood to flow only in one direction.)

I. Venule--Very small vein

J. Artery--Blood vessel that carries blood from the heart

(NOTE: These vessels have three muscular walls and carry blood from the pumping chambers of the heart to the organs.)

K. Arteriole--Very small artery

L. Capillary--Minute blood vessel between arterioles and venules

(NOTE: These tubes are made up of endothelial cells that carry materials necessary to cell life into tissues and carry waste products from the cells.)

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INFORMATION SHEET

M. Valve--Membranous fold in passageway of heart that prevents the return of the blood passing through it

(NOTE: Valves are located at the entrance and exit of each ventricle to keep the blood from returning and to keep the blood flowing in the right direction.)

Examples: Tricuspid, pulmonary semilunar, bicuspid, aortic semilunar valves

N. Aorta--Main trunk of the arterial system; largest artery

O. Coronary--Pertaining to blood vessels which supply the heart walls

P. S-A node--Pacemaker; small mass of specialized muscle fibers in the walls of the right atrium which usually establishes the rhythm of cardiac contractions

Q. A-V node--Mass of specialized muscle fibers located in the sputum at the junction of the four chambers; responsible for conducting impulses to the conduction fibers of the heart

R. Septum--Wall in the middle of heart that divides it into right and left sides

S. Systole--Period during which heart contracts

T. Diastole--Period during which heart rests between contractions

U. Lymph nodes--Small bundles of special lymphnoid tissue; also called lymph glands

V. Conduction system--Combined nerve and muscle tissue which regulate the order in which heart contractions occur

W. Portal circulation--Includes veins from the stomach, intestine, spleen, and pancreas that empty into one vessel, the portal vein

(NOTE: This portal vein carries blood loaded with digested food to the liver which extracts food materials for storage and modification, including removal of toxins.)

X. Lymphatic system--Network of very small lymph capillaries that collect excess tissue fluid and certain waste products from the body cells (Transparency 4)

(NOTE: Lymph resembles plasma but contains less protein.)

INFORMATION SHEET

II. Functions of the circulatory system

  A. Transportation of nutrients and oxygen to body cells

  B. Transportation of waste products to excretory organs

  C. Distribution of hormones and antibodies

  D. Assistance in control of body temperature

  E. Maintenance of stable chemical balance between the cell and its environment

III. Structures of the heart (Transparency 1)

  A. Layers of the heart wall

    1. Endocardium
    2. Myocardium
    3. Pericardium

  B. Chambers

    1. Right atrium or auricle
    2. Right ventricle
    3. Left atrium or auricle
    4. Left ventricle

  C. Valves

    1. Tricuspid
    2. Pulmonary semilunar
    3. Aortic semilunar
    4. Bicuspid or mitral

  D. Blood vessels

    1. Veins

      a. Superior vena cava

      b. Inferior vena cava

      c. Right pulmonary veins

      d. Left pulmonary veins

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INFORMATION SHEET

    2. Arteries
        a. Aorta
        b. Right subclavian artery
        c. Left subclavian artery
        d. Right carotid artery
        e. Left carotid artery
        f. Pulmonary artery

IV. Major arteries and veins

- A. Body veins (Transparency 2)
    - 1. Jugular
    - 2. Subclavian
    - 3. Axillary
    - 4. Vena cava--Superior and inferior
    - 5. Brachial
    - 6. Renal
    - 7. Iliac
    - 8. Radial
    - 9. Ulnar
    - 10. Femoral
    - 11. Saphenous
    - 12. Popliteal
    - 13. Tibial
- B. Body arteries (Transparency 3)
    - 1. Aorta
    - 2. Carotid
    - 3. Subclavian

INFORMATION SHEET

4. Axillary
5. Brachial
6. Mesenteric
7. Renal
8. Radial
9. Ulnar
10. Iliac
11. Femoral
12. Popliteal
13. Tibial
14. Dorsalis pedis

V. Major blood vessels of the head

A. Arteries

1. Carotid
2. Temporal
3. Facial
4. Occipital
5. Cerebral

B. Veins

1. Facial
2. Temporal
3. Occipital
4. Cerebral

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INFORMATION SHEET

VI. Ways to help prevent heart and circulatory ailments

A. Proper nutrition to maintain desirable weight for age and height

(NOTE: Obesity does not directly cause heart disease, but it does put strain on the heart. Also, certain food elements are essential for blood formation and clotting of the blood.)

B. Regular exercise

(NOTE: Exercise aids circulation, but sudden bursts of strenuous activity may damage the heart.)

C. Avoidance of sudden extremes in temperature

(NOTE: Cold especially may affect the blood vessels and precipitate a heart attack.)

D. Temperate habits in use of alcohol and tobacco

(NOTE: Both have a damaging effect on the heart and blood vessels.)

E. Regular physical evaluation

(NOTE: Periodic physical examinations of children aid in early detection of heart disease and detect any abnormal conditions in the adult.)

F. Prevention and care of infections

(NOTE: There is a definite relationship between streptococcal infections of the throat and heart disease.)

G. Adequate rest

(NOTE: Rest aids heart and body in renewing itself.)

H. Maintenance of good posture

(NOTE: Good posture gives heart and lungs sufficient area in which to function.)

I. Avoidance of long periods of sitting with the legs crossed

(NOTE: This interferes with return of flow of blood from lower extremities.)

J. Avoidance of wearing apparel which interferes with circulation

INFORMATION SHEET

VII. Terms and definitions associated with the blood

A. Hematology--Study of the blood

B. Homeostasis--State of chemical balance between a cell and its environment

C. Gamma globulin--Antibody fraction of blood

D. Erythrocytes--Red blood cells

E. Leukocytes--White blood cells

F. Corpuscles--Blood cells

G. Granulocytes--White blood cells having a lobed nucleus and granules in the cytoplasm

H. Hemoglobin--Oxygen-carrying protein pigment of the red blood cells

I. Coagulation--Clotting of blood

J. Plasma--Liquid portion of blood

K. Transfusion--Injection of one person's blood into the blood vessels of another person

L. Hemorrhage--Abnormal discharge of blood either externally or internally

M. Lipid--Any of a group of fat or fatlike substances which are insoluble in water

N. Anemia--Deficiency of red blood cells or hemoglobin or both

O. Shock--Depression of the body functions due to the failure of circulation

P. Bone marrow puncture--Insertion of a hollow needle into marrow cavity of a flat bone to withdraw a sample of bone marrow

Q. Hematocrit--Volume percentage of erythrocytes in whole blood

R. Anticoagulant--Agent which prevents or delays formation of blood

Example: Heparin, an acid manufactured by the liver

S. Thrombus--Clot formed in a blood vessel

T. Embolus--Thrombus which has moved from the site where it was formed

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INFORMATION SHEET

VIII. General functions of blood

A. Transportation

Examples: Oxygen carried from the lungs to the tissues and carbon dioxide from the tissues to the lungs; nutrients carried from the digestive tract to tissues and waste products from tissues to excretory organs; hormones and heat carried to organs and muscles

B. Maintenance of homeostasis

(NOTE: Blood helps maintain acid-base, electrolyte, and fluid balance.)

C. Resistance to infection

(NOTE: Some components of blood fight infection and some help maintain immunity to disease.)

IX. Principal components of blood plasma

A. Water

(NOTE: Water comprises about ninety percent of the blood plasma and acts as carrier for the remaining one hundred or so components.)

B. Blood proteins

(NOTE: These comprise about seven percent of the blood plasma.)

Examples: Amino acids, antibody fractions, blood clotting proteins, serum albumin

C. Carbohydrates, principally glucose

D. Lipids

E. Mineral salts

(NOTE: These are needed for bone formation, hormone production, production of red cells, and maintenance of acid-base balance.)

F. Waste products

G. Hormones and vitamins

H. Gases (oxygen, nitrogen, and carbon dioxide)

INFORMATION SHEET

I. Heparin

(NOTE: This is an acid which prevents clotting in the blood stream.)

J. Vitamin K

(NOTE: This aids in clotting.,

X. Characteristics of blood cells

A. Erythrocytes

(NOTE: These cells are also called RBC's, red blood cells or red corpuscles, and are found in the red bone marrow, spleen, and other lymph tissue.)

1. Transport oxygen to cells and carbon dioxide from cells
2. Are minute, disc-shaped cells that look alike or very similar
3. Have an average life span of 120 days
4. Remain in bloodstream unless a vessel is cut or ruptured

B. Leukocytes

(NOTE: These cells are also call WBCs, white blood cells, or white corpuscles and tissue.)

1. Fight infection
2. Are colorless
3. Vary in shape and size
4. Have average life span of nine days
5. May move out of the blood vessels by passing between cells of the vessel walls

C. Platelets

(NOTE. These cells are found in the red bone marrow; they are also called thrombocytes and aid in coagulation of blood.)

1. Are irregular in size and shape
2. Are very fragile and break easily under stress
3. Can be seen in clusters

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INFORMATION SHEET

XI. Reasons for blood transfusions

A. To replace blood lost through hemorrhage

B. To treat anemia

C. To treat shock

D. To exchange blood in certain blood disorders

E. To aid recovery as a preoperative or postoperative procedure

XII. Blood groups

(NOTE: In theory, blood can be given according to this table:

Blood type	Can receive blood from	Can give blood to
A	A and O	A and AB
B	B and O	B and AB
AB	All	AB
O	O	All

However, blood is nearly always given to persons from the same blood group and only after cross-matching to minimize adverse reactions.)

A. Type O

(NOTE: About forty-five percent of all people have type O blood.)

B. Type AB

(NOTE: About four percent of all people have type AB blood.)

C. Type A

(NOTE: About forty percent of all people have type A blood.)

D. Type B

(NOTE: About ten percent of all people have type B blood.)

XIII. Rh factor

A. Approximately eighty-five percent of the population have a red blood cell protein called the Rh factor; these people are Rh positive

B. Approximately fifteen percent of the population do not have this protein; these people are Rh negative

INFORMATION SHEET

C. When Rh positive blood is given to an Rh negative person, the recipient's Rh negative blood may produce counteracting proteins, called antibodies, which will destroy the red cells from the Rh positive blood; this does not happen when Rh negative blood is given to an Rh positive recipient

D. An Rh negative mother may become sensitized by proteins from an Rh positive baby

(NOTE: The Rh positive factor in the baby would be inherited from the father.)

E. During pregnancies following sensitization, the mother's antibodies may pass into the blood of the unborn infant and cause erythroblastosis fetalis, a destruction of red blood cells

(NOTE: Erythroblastosis fetalis may be fatal; if the infant is born alive, it may need complete blood replacement with Rh negative blood.)

XIV. Routine blood studies

A. Hemoglobin measurement--Measures the amount of pigment which contains iron in the red blood cells

(NOTE: Its function is to carry oxygen from lungs to tissues.)

B. Total red cell count--Measures the total volume of red corpuscles (erythrocytes)

C. Total white cell count--Measures total volume of white corpuscles (leukocytes)

(NOTE: Differential white count is usually done with the total white count and gives the percentages of each type of white cell.)

D. Serology--Scientific study of serum

(NOTE: This is also a test that can detect syphilis.)

E. Blood chemistry tests--Measures levels of blood components from venous blood sample

Examples: Electrolytes, enzyme levels

XV. Less common blood tests done for more specific diagnoses

A. Platelet count

B. Blood sugar

C. Clotting time and bleeding time

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INFORMATION SHEET

D. Examination of blood for parasites

E. Bone marrow puncture

XVI. Normal range of blood tests in adults

A. Erythrocytes--4,500,000 to 5,000,000

B. Leukocytes--5,000 to 10,000

C. Platelets--200,000 to 400,000

D. Hemoglobin--12-18 gm%

E. Hematocrit--38-50%

XVII. Terms and definitions associated with heat and cold

A. Suppuration--Formation or discharge of pus

B. Metabolic disease--Disease caused by a defect in the chemical processes of the cells of the body

C. Necrosis--Death of a cell or group of cells

D. Hypothermia treatment--Deliberate reduction of temperature in all or part of the body

E. Ultraviolet rays--Invisible rays produced by the sun or with special equipment which cause tanning of the skin, kill bacteria, and aid in metabolism of vitamin D

F. Infrared rays--Rays produced by the sun which provide heat; can be produced with special equipment

G. Compress--Cloth, wet or dry, folded and applied firmly to a part of the body

H. Inhalation--Introduction of dry or moist air or vapor into the lungs for therapeutic purposes

I. Systemic--Pertaining to the whole body rather than one of its parts

J. Frostbite--Freezing or the effect of freezing a part of the body

K. Congestion--Abnormal accumulation of blood in a body part

L. Etiology--All the causes of a disease or abnormal condition

INFORMATION SHEET

XVIII. Local effects of heat and cold

A. Heat

1. Dilation of blood vessels in area
2. Increased blood supply

   (NOTE: This provides more nutrients and oxygen to the tissues and increases removal of toxins and excess tissue fluids.)
3. Increased or decreased swelling depending upon etiology and stage of diseases or injury
4. Reduction of pain
5. Increased suppuration

B. Cold

1. Constriction of blood vessels in area
2. Decreased blood supply to part
3. Prevention or decrease of swelling
4. Diminished bleeding
5. Decreased suppuration
6. Reduction of sensation and lessening of pain with prolonged exposure
7. Cooling of the part and eventually the body
8. Decreased inflammation

XIX. Systemic effects of heat and cold

A. Heat

1. Diminished blood supply to other parts of the body which may result in weakness, dizziness, or fainting
2. Drowsiness
3. Sense of well-being due to relief of pain

B. Cold

1. Slowing of metabolism from prolonged application
2. Decreased tissue stress as a result of trauma

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3. Reduction of blood loss

XX. Forms of heat

A. Dry heat

1. Warm water bottle

(NOTE: This is a flat rubber bag with removable stopper or other type of closure.)

2. Electric pad

(NOTE: This is a covered network of wires which radiate heat when an electrical current is passed through it.)

3. Chemical hot pack

(NOTE: This is a prefilled plastic package containing interreacting ingredients, which when combined by squeezing, produce sustained heat.)

4. Circulating water pad

(NOTE: This is a plastic pad through which warm water is circulated by an electric motor.)

5. Heat lamp

(NOTE: This is a lamp with regular light bulb to provide external heat.)

6. Heat cradle

(NOTE: This is a cradle equipped with light bulbs to provide heat.)

7. Infrared and ultraviolet lamps

(NOTE: These are lamps with special bulbs to provide rays for specific treatments.)

B. Moist heat

1. Warm moist packs or compresses

(NOTE: These are pieces of material from which hot water is wrung before applying to affected areas.)

2. Sitz bath

INFORMATION SHEET

XXI. Forms of cold

A. Dry cold

1. Ice bag

   (NOTE: This is a flat bag filled with ice.)

2. Ice collar

   (NOTE: This is a narrow rubber bag filled with ice and usually used around the neck.)

3. Hypothermia blanket or mattress

   (NOTE: This is a plastic pad through which cold water flows continuously.)

4. Chemical cold pack

   (NOTE: This is a prefilled plastic package containing interreacting ingredients which are combined by squeezing to produce sustained cold. There are several forms of warm packs and cold packs available commercially. Some are used once and discarded; others are cleaned and used again. Their preparation and use may vary so the health assistant should check instructions for using the equipment.)

B. Moist cold

1. Cold moist packs or compresses

   (NOTE: These are small gauze pads, cotton covered with gauze, or a washcloth from which ice water is wrung before applying.)

2. Alcohol, cool, or tepid sponge bath

   (NOTE: This is a sponge bath using alcohol, cool or tepid water, or a combination of alcohol and water.)

   (CAUTION: Some patients may react unfavorably to cool baths; others may be unable to tolerate them. Cool baths should not be used for patients with arteriosclerosis, arthritis, lowered resistance, or for very young children. The initial effect of cold on the body may produce unfavorable reactions. If patient has a weak, rapid pulse, cyanosis, or chills, the bath should be discontinued and moderate heat applied.)

3. Cool vapor inhalations

   (NOTE: This treatment involves water cooled to provide cool mist to the respiratory system.)

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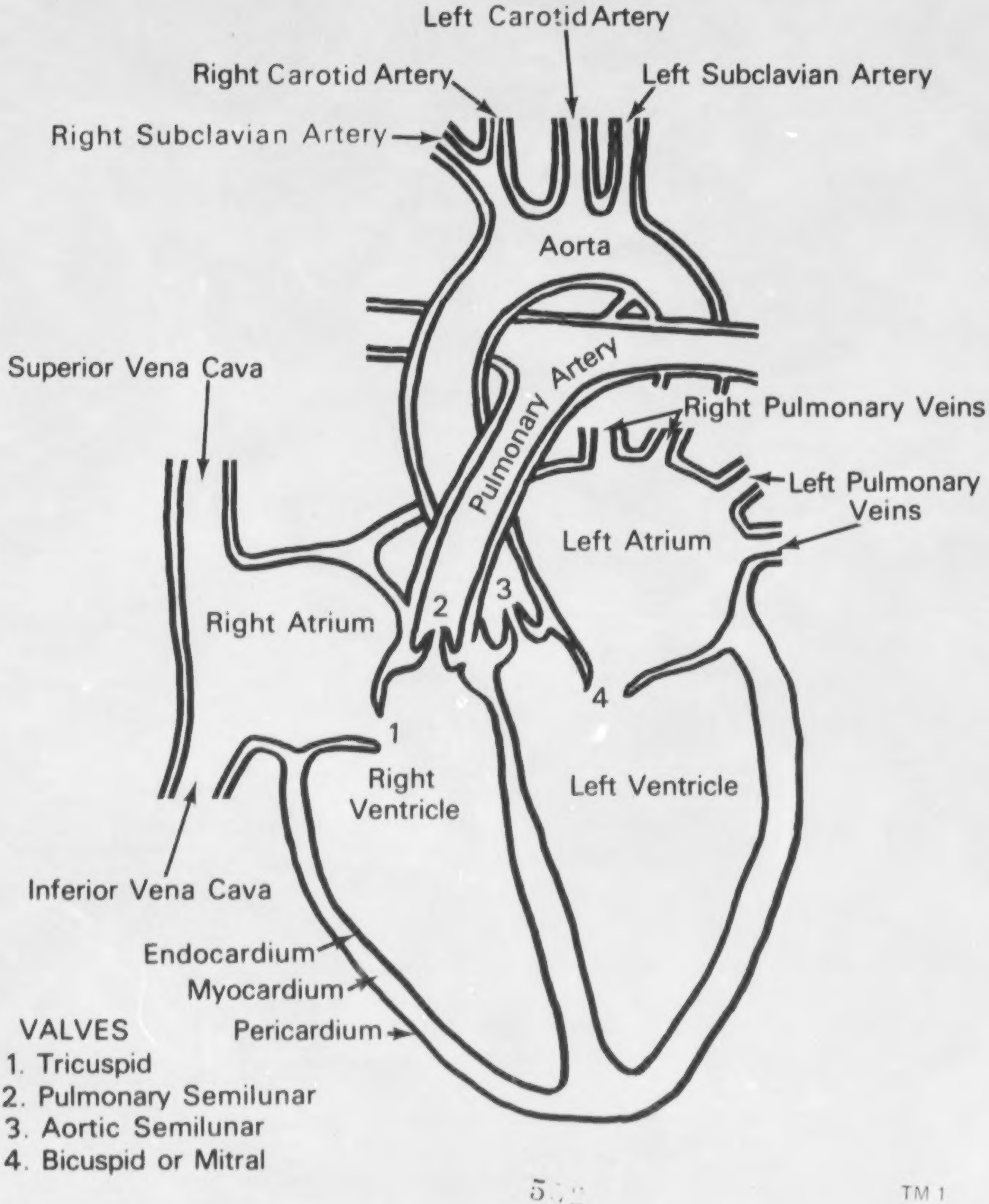
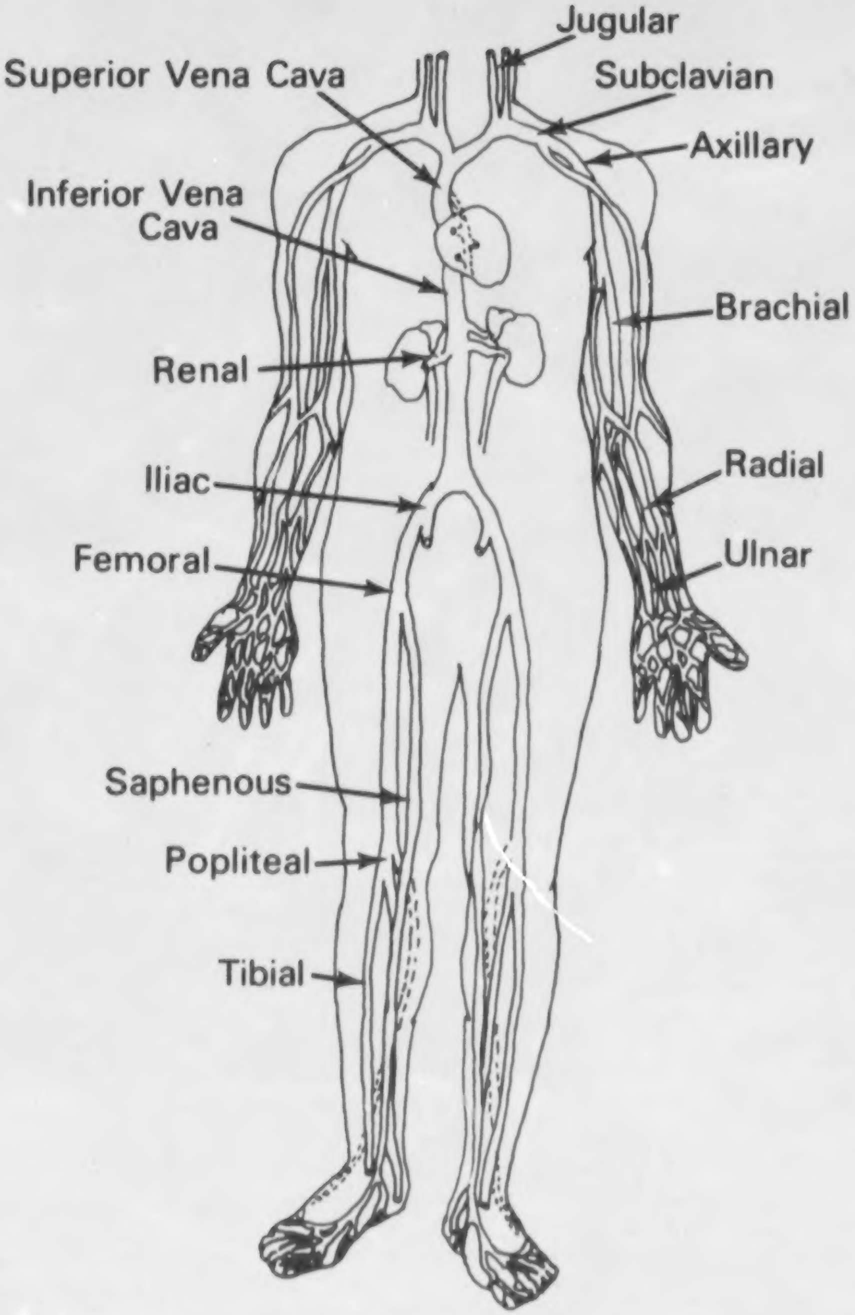
Structure of the Heart



Principal Veins



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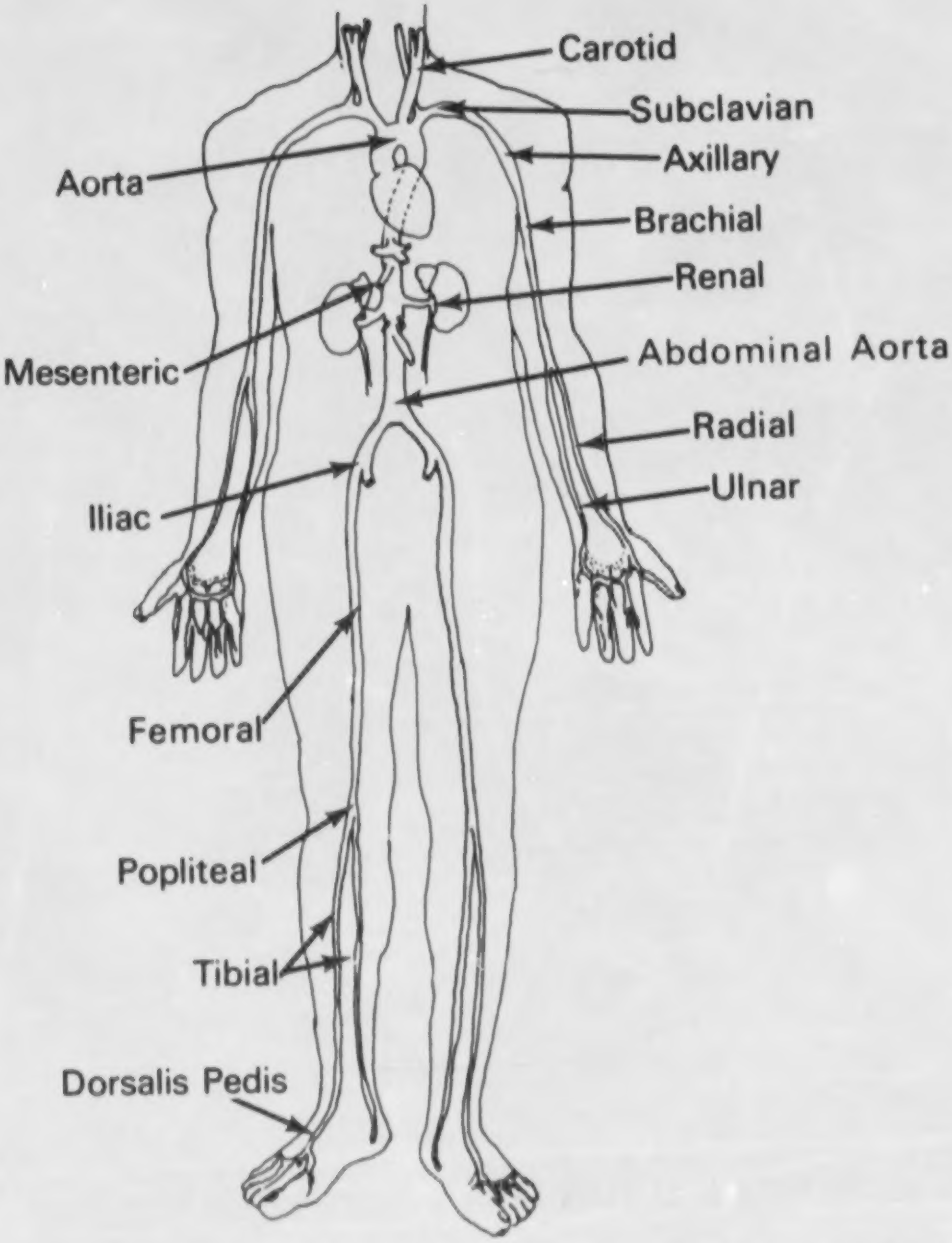
Principal Arteries



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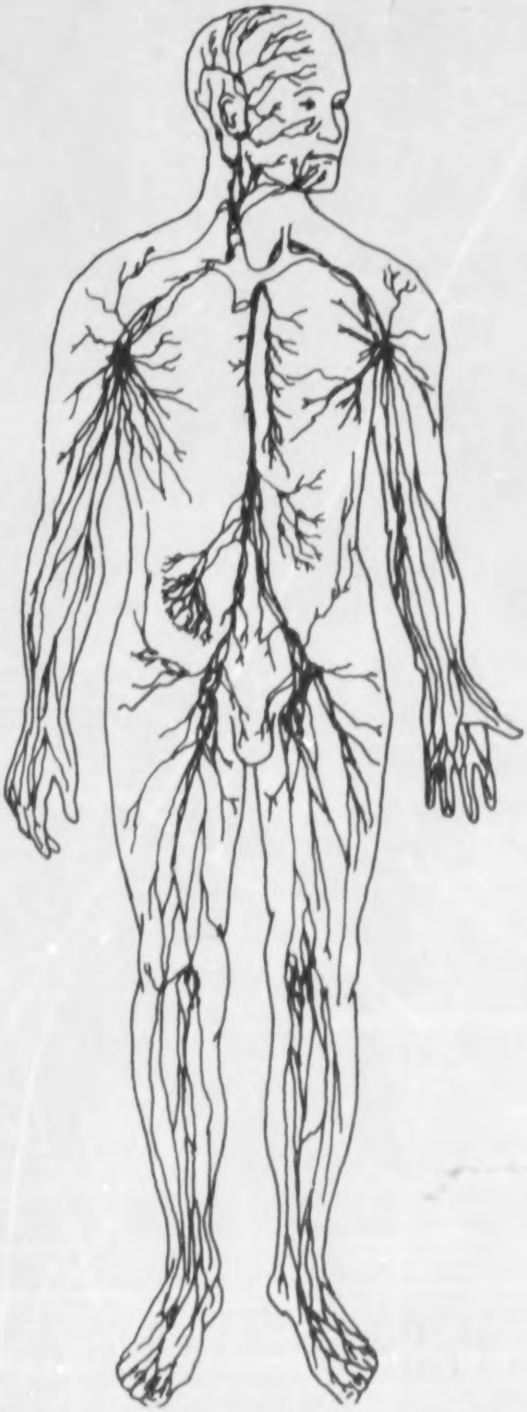
The Lymphatic Structures



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CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #1--USE A WARM WATER BOTTLE

I. Equipment needed

- A. Warm water bottle
- B. Cover for bottle
- C. Bath thermometer
- D. Graduate

II. Procedure

- A. Wash hands
- B. Fill graduate with water and test temperature approximately 43°C-46°C (110°F-115°F)
- C. Fill warm water bottle about one-half or one-third full
- D. Expel air from warm water bottle
    1. Place water bottle on ledge of sink
    2. Hold neck of bottle upright until water reaches neck of bottle; secure top
- E. Check for leakage; place in cover
- F. Replace thermometer and graduate
- G. Take warm water bottle to patient's bedside
- H. Identify patient and explain procedure

    (CAUTION: Never place any form of heat equipment against the skin of an unconscious patient.)
- I. Provide privacy
- J. Place bottle on affected area

    (CAUTION: Never allow a patient to lie on a warm water bottle.)
- K. Place communication device within reach of patient
- L. Check patient and affected area frequently
- M. Refill bottle when needed

JOB SHEET #1

N. Remove warm water bottle at end of prescribed time or if adverse reaction occurs

O. Clean and return bottle and cover to designated area

P. Wash hands

Q. Report and record treatment and effects

(NOTE: Heat is applied only when ordered by a physician.)

CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #2--USE AN ELECTRIC HEATING PAD

(NOTE: Application of a heating pad must be ordered by physician.)

I. Equipment needed

   A. Electric heating pad

   B. Cover

II. Procedure

   A. Wash hands

   B. Assemble equipment

   C. Check pad by plugging it into an electric outlet

   (CAUTION: Pad should begin to warm immediately. Do not use any pad with a frayed or worn cord. Observe safety rules when using any electrical equipment.)

   D. Take covered pad to patient's bedside

   E. Identify patient and explain procedure, stressing necessary safety measures

   F. Plug in cord as close to the bed as possible; turn control button to low

   G. Place pad on the affected area; secure pad in place

   (CAUTION: Never allow patient to lie directly on a heating pad.)

   H. Place communication device within reach of patient

   I. Return frequently

      1. Check patient closely

      2. Check appliance to see that it is working properly

      3. Check patient's skin closely for increased or decreased redness, pain, or blood circulation

      4. Discontinue treatment immediately and report to the person in charge, if adverse symptoms or reactions develop

   J. Remove heating pad when treatment is completed

   K. Provide for patient's comfort

JOB SHEET #2

L. Return equipment to designated area

M. Wash hands

N. Report and record treatment

CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #3--ADMINISTER A CHEMICAL HOT PACK

(NOTE: The chemical hot pack comes in a variety of shapes and sizes. Selection depends upon site of treatment. The pack may be disposable. It is applied directly to the skin surface.)

Procedure

A. Wash hands

B. Obtain a chemical hot pack

C. Take pack to bedside

D. Identify patient and explain procedure

E. Provide privacy

F. Mix contents of package according to manufacturer's instructions

   (CAUTION: If package is punctured and contents leak onto the skin, wash thoroughly and quickly to avoid irritation.)

G. Apply pack to designated area; if necessary, secure pack by wrapping with a towel

H. Place communication device within reach of patient

I. Return frequently

   1. Check patient's skin for an increase or decrease in redness, swelling, pain, and blood circulation

   2. Follow the same general principles and safety precautions for a chemical pack as you would for any other type of heat application

J. Replace pack as needed to provide heat for the prescribed length of time

K. Remove pack when treatment is completed

L. Provide for patient's comfort; place communication device conveniently

M. Wash hands

N. Report and record treatment and observations

CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #4--USE A HEAT LAMP

(NOTE: A variety of heat lamps are available and specific instructions should be given. If there are no instructions, consult with supervisor before using equipment.)

Procedure

A. Wash hands

B. Take lamp to bedside

C. Identify patient and explain procedure

D. Provide privacy

E. Replace top covers with bath blanket or cover

F. Position patient for comfort and expose area to be treated

G. Place lamp 18"-20" from area to be treated

H. Place communication device within reach of patient

I. Return frequently

   1. Check position of lamp and patient

   2. Observe patient's skin for signs of excessive heat and redness

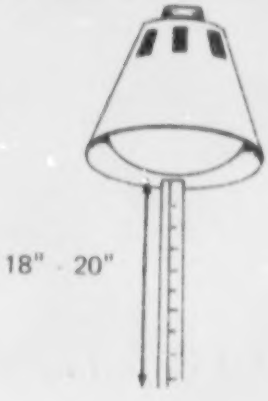
   3. Check patient for adverse symptoms or complaints of too much heat

J. Remove heat lamp when treatment is completed

K. Replace covers and provide for patient's comfort; place communication device conveniently

L. Wash hands

M. Report and record treatment and observations



CIRCULATORY SYSTEM
UNIT IX

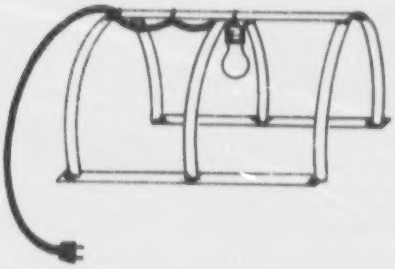
JOB SHEET #5--USE A HEAT CRADLE

(NOTE: The heat cradle is like the cradle used to keep the bedding off of patient's body with an electric cord and bulb attatched to provide heat. When being used, the cradle is covered by a sheet or top bedding to keep heat within the area. The size of the cradle permits circulation of air. A heat cradle is usually used on the lower trunk or legs to promote healing of wounds, to increase circulation, to provide warmth, or to dry a plaster cast.)

I. Equipment needed

  A. Heat cradle

  B. Bath blanket



II. Procedure:

  A. Wash hands

  B. Take heat cradle to bedside

  C. Identify patient and explain procedure

  D. Provide privacy

  E. Replace top covers with bath blanket or cover

  F. Position cradle over area to be treated

  G. Plug in cord as near bed as possible; place cord where it will not be in the way

  H. Cover cradle with top bedding; remove bath blanket

  (CAUTION: Be sure patient and covers are a safe distance from the light bulb.)

  I. Provide cover as needed to avoid exposure

  J. Place communication device within reach of patient

  K. Return frequently; check for excessive heat or adverse reaction to treatment

  L. Remove cradle when treatment is completed

  M. Replace covers and provide for patient's comfort; place communication device conveniently

  N. Wash hands

  O. Report and record treatment and observations

CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #6--APPLY WARM, WET COMPRESSES

I. Equipment needed

A. Compress cloths

B. Warm water bottles with covers or electric heating pad

C. Bath towels

D. Waterproof material

E. Bath thermometer

F. Tray

G. Electric hot pack machine or basin of solution approximately 51°C-54°C (125°F to 130°F)

II. Procedure

A. Wash hands

B. Assemble equipment and take to bedside

(NOTE: Use electric hot pack machine according to instructions or basin of warm solution.)

C. Identify patient and explain procedure

(CAUTION: Sight of the warm pack may be frightening to patient. Explain that the compresses are wrung very dry, lose heat quickly, and are applied gradually.)

D. Provide privacy

E. Wring compresses as dry as possible; apply gradually to affected area

(NOTE: Tolerance to heat varies greatly with each individual and the area involved. Only the patient knows when an application is too hot.)

F. Cover compresses with waterproof material and a towel or other dry material

G. Use hot water bottle, electric heating pad, or chemical hot pack to keep compresses warm, as permitted

H. Place communication device within reach of patient

I. Return frequently to observe patient and area being treated

JOB SHEET #6

J. Remove warm compresses and dry area gently

K. Provide for patient's comfort; place communication device conveniently

L. Care for supplies and equipment

M. Wash hands

N. Report and record treatment and observations

CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #7--ASSIST WITH SITZ BATH

I. Equipment needed

   A. Portable sitz chair, disposable sitz bath, sitz tub, or bathtub (See Figures 1 and 2)

   B. Small blanket

   C. Bath towels

   D. Large pitcher

   E. Bath thermometer

II. Procedure

   A. Prepare bathroom and solution

      1. Prevent drafts by closing windows in room

      2. Fill sitz bath with water

      3. Check to see that temperature of water is approximately 40°C-43°C (105°F to 110°F)

      4. Place towel in tub for patient to sit on

   B. Identify patient and explain procedure

   C. Assist patient into sitz chair or tub

   (NOTE: If disposable sitz bath is used, seat patient on commode into which sitz bath is placed.)

      1. Regulate flow of solution from suspended reservoir

      2. Refill reservoir as needed

   D. Place towel over thighs; drape bath blanket about patient if chilly

   E. Continue treatment for specified time, usually fifteen to twenty minutes

   F. Stay with patient during treatment

   (CAUTION: Observe patient closely; the effect of heat on a relative large portion of the body may cause weakness or vertigo.)

   G. Assist patient from sitz chair or tub

JOB SHEET #7

H. Dry and assist patient in dressing and returning to bed

I. Provide for patient's comfort; place communication device conveniently

J. Clean bath area

K. Wash hands

L. Report and record duration of treatment and observations

FIGURE 1

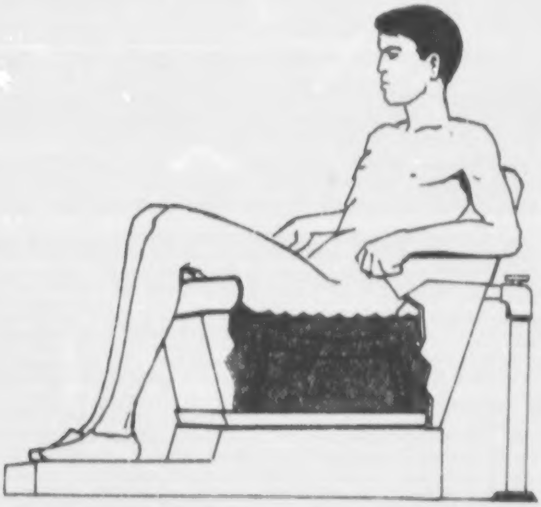


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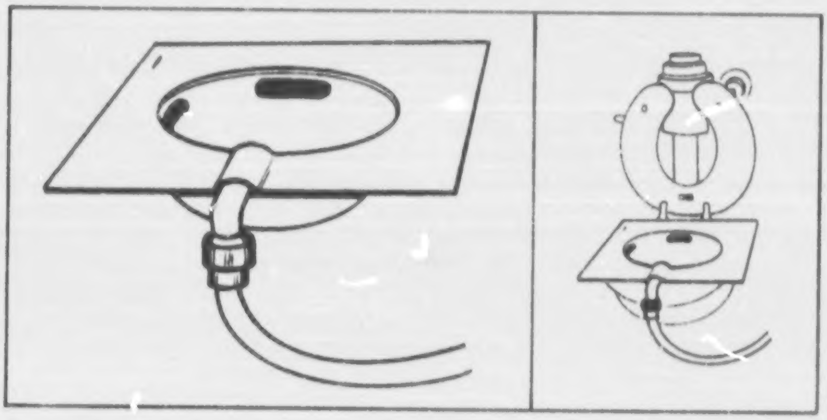
FIGURE 2



CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #8--USE AN ICE BAG OR ICE COLLAR

I. Equipment needed

   A. Ice bag or ice collar

   B. Cloth cover

   C. Ice scoop or spoon

   D. Basin

   E. Ice cubes or crushed ice

   F. Paper towel

   G. Bath towel

II. Procedure

   A. Wash hands

   B. Assemble equipment

      1. Fill basin with ice

      2. Fill ice cap half full

      3. Expel air by resting ice cap or collar on table in horizontal position

      4. Close top

      5. Wipe with paper towel and check for leakage

      6. Cover

      (CAUTION: Cover must be used to prevent frostbite.)

   C. Take equipment to bedside

   D. Identify patient and explain procedure

   E. Place ice bag on designated area

   F. Place communication device within reach of patient

   G. Return frequently to check patient and affected area

   (NOTE: Prolonged application produces numbness and interruption of circulation and may cause pain.)

JOB SHEET #8

(CAUTION: Note any blanching or spotting of the skin which indicates interference with circulation.)

H. Refill ice bag as necessary

I. Remove ice bag when treatment is finished; clean and return equipment to storage

J. Provide for patient's comfort; position communication device conveniently

K. Wash hands

L. Report and record treatment and observations

CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #9- APPLY A CHEMICAL COLD PACK

(NOTE: Chemical cold packs are manufactured in several sizes and shapes. When ingredients are mixed according to manufacturer's instructions, they produce a sustained, controlled temperature lasting from thirty minutes to four hours. The temperature range is from 50° to 80°F. Because of the controlled temperature of the packs, it is nearly impossible to cause a freeze burn on the patient. Since there are so many different kinds of cold packs made, it is absolutely essential to read the directions for the specific product being used.)

Procedure:

A. Wash hands

B. Obtain chemical cold pack and take to bedside

C. Identify patient and explain procedure

D. Mix contents of package according to the manufacturer's instructions

E. Apply pack to the designated area, wrapping as necessary with a towel to keep pack in place

F. Place communication device within reach of patient

G. Return frequently to observe patient and affected area

H. Replace pack as needed

I. Remove pack when treatment is completed

J. Provide for patient's comfort; position communication device conveniently

K. Wash hands

L. Report and record treatment and observations

CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #10--APPLY COLD, MOIST PACKS

I. Equipment needed

   A. Basin containing cracked ice and water

   B. Compresses

   C. Small waterproof sheet

II. Procedure

   A. Wash hands

   B. Assemble equipment and take to bedside

   C. Identify patient and explain procedure

   D. Provide privacy

   E. Remove top covers and replace them with bath blanket or cover, if necessary

   F. Place waterproof sheet under area to be treated

   G. Wring compress to prevent dripping; apply to affected area

   H. Change compress frequently

   I. Continue treatment for prescribed time

   (NOTE: If patient is able to change compresses, explain procedure and allow patient to continue.)

   J. Place communication device within reach of patient

   K. Return frequently to observe patient and affected area

   L. Remove compresses at the end of the prescribed time

   M. Dry affected area gently

   N. Provide for patient's comfort; position communication device conveniently

   O. Clean equipment and return to storage

   P. Wash hands

   Q. Record and report treatment and observations

CIRCULATORY SYSTEM
UNIT IX

JOB SHEET #11--GIVE A COOL OR TEPID SPONGE BATH

I. Equipment needed

   A. Three washcloths

   B. Three bath towels

   C. Waterproof pillowcase

   D. Ice bag with cover

   E. Warm water bottle approximately 46°C (115°F) with cover

   F. Bath thermometer

   G. Bath blanket or cover

   H. Small basin with ice

   I. Basin one-third to one-half full of solution at proper temperature

   J. Pencil and paper

   K. Thermometer with container

II. Procedure

   A. Wash hands

   B. Prepare equipment; fill basin with water

      1. For tepid sponge bath, water temperature should be kept between 90° to 105°F

      2. For cold sponge bath, water temperature is to be kept between 65° to 90°F

      3. For alcohol sponge bath, mix 70% alcohol with equal parts of water

   C. Take equipment to bedside

   D. Identify patient and explain procedure

   E. Offer bedpan or urinal

   F. Remove gown and top bedding; replace with bath blanket or cover

   G. Put waterproof case on pillow; cover with pillowcase

JOB SHEET #11

H. Place ice bag on head and warm water bottle at feet

I. Record temperature, pulse, and respirations

J. Place cool, moist towel over abdomen and cool, moist washcloths in axillae and groin

K. Sponge each arm for approximately five minutes; pat dry

L. Sponge chest for five minutes; pat dry

(NOTE: Do not sponge abdomen.)

M. Sponge each leg for five minutes; pat dry

N. Turn patient on side

O. Sponge entire length of back for five minutes; pat dry

(CAUTION: Do not sponge longer than thirty minutes.)

P. Put on gown or pajamas

Q. Remove ice cap and warm water bottle

R. Change linen as needed

S. Replace top covers

T. Provide for patient's comfort; position communication device conveniently

U. Clean and replace equipment

V. Wash hands

W. Take temperature, pulse, and respirations every thirty minutes after sponge bath is completed

X. Report and record treatment and observations

(NOTE: A nursing measure which is similar to the cooling sponge is the use of a wet sheet and fan to increase heat elimination from the body. Patient is covered with only a wet sheet and a fan is so directed as to create a constant flow of air over the sheet. This procedure promotes evaporation and convection of heat. During treatment, patient and patient's vital signs should be watched closely.)

CIRCULATORY SYSTEM
UNIT IX

TEST

NAME ______________________________ SCORE ____________

1. Match the terms associated with the circulatory system to their correct definitions by placing the appropriate numbers in the blanks provided.

______a. Period during which heart contracts

______b. Very small artery

______c. Middle layer of heart muscles; also thickest layer

______d. Pertaining to the heart

______e. Wall in the middle of heart that divides it into right and left sides

______f. Very small vein

______g. Upper chamber or compartment of heart; there are two, one on each side

______h. Study of the heart

______i. Blood vessel that carries blood to the heart

______j. Main trunk of the arterial system; largest artery

______k. Period during which heart rests between contractions

______l. Pacemaker; small mass of specialized muscle fibers in the wall of the right atrium which usually establishes the rhythm of cardiac contractions

______m. Smooth layer of cells that lines inside of heart and forms valves

______n. Pertaining to blood vessels which supply the heart walls

1. Cardiac
2. Cardiology
3. Myocardium
4. Atrium
5. Vein
6. Venule
7. Arteriole
8. Aorta
9. S-A node
10. Septum
11. Systole
12. Diastole
13. Endocardium
14. Coronary

_____o. Network of very small lymph capillaries that collect excessive tissue fluid and certain waste products from body cells

_____p. Combined nerve and muscle tissue which regulate the order in which heart contractions occur

_____q. Double membrane that covers the heart and secretes fluid which provides lubrication preventing friction during heart action

_____r. Lower pumping chamber of heart; there are two, one on each side

_____s. Minute blood vessel between arterioles and venules

_____t. Membranous fold in passageway of heart that prevents the return of the blood passing through it

_____u. Small bundles of special lymphnoid tissue; also called lymph glands

_____v. Includes veins from stomach, intestine, spleen, and pancreas that empty into one vessel, the portal vein

_____w. Mass of specialized muscle fibers located in the septum at the junction of the four chambers; responsible for conducting impulses to the conduction fibers of the heart

_____x. Blood vessel that carries blood from the heart

15. Lymphatic system
16. Conduction system
17. Portal circulation
18. Ventricle
19. Valve
20. Pericardium
21. Capillary
22. Lymph nodes
23. A-V node
24. Artery

2. Select from the list below functions of the circulatory system by placing an "X" in the appropriate blanks.

_____a. Transportation of nerve impulses

_____b. Assistance in control of body temperature

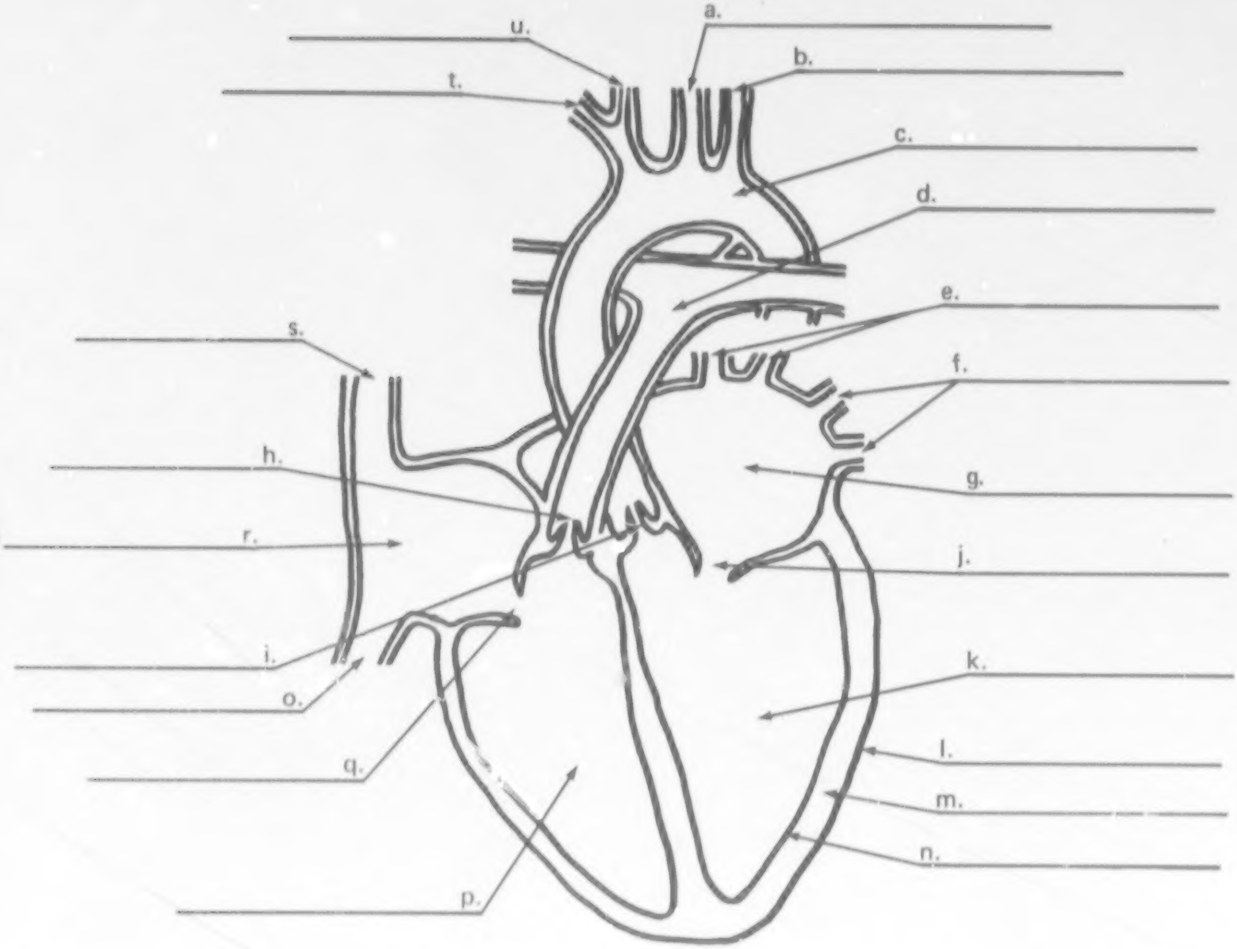
_____c. Transportation of nutrients and oxygen to body cells

_____d. Transportation of waste products from endocrine organs

_____e. Distribution of hormones and antibodies

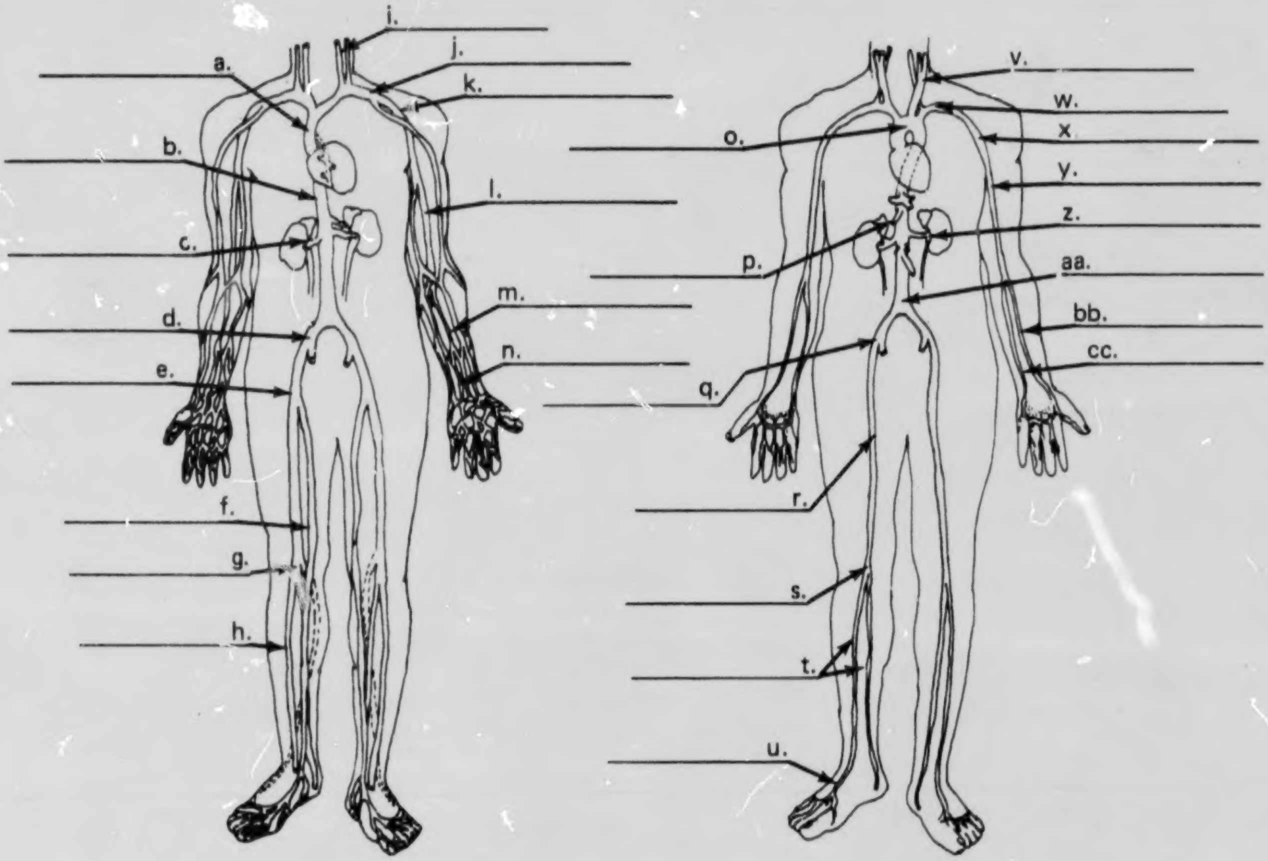
_____f. Maintenance of stable chemical balance between cell and its environment

3. Identify structures of the heart shown in the diagram below by writing the correct name of each structure in the blanks provided.



4. Identify major arteries and veins on the diagrams below. Write the correct name of each artery and vein in the blanks provided.

BODY VEINS **BODY ARTERIES**



5. Name major blood vessels of the head.

Arteries		Veins	
a.	____________	a.	____________
b.	____________	b.	____________
c.	____________	c.	____________
d.	____________	d.	____________
e.	____________		

6. Name five ways to help prevent heart and circulatory ailments.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

7. Match terms associated with blood on the right to their correct definitions by placing the appropriate numbers in the blanks provided.

______a. Clot formed in blood vessel

______b. Deficiency of red blood cells or hemoglobin or both

______c. Antibody fraction of blood

______d. Clotting of blood

______e. Thrombus which has moved from site where it was formed

______f. Blood cells

______g. Study of the blood

______h. Red blood cells

______i. Volume percentage of erythrocytes in whole blood

______j. Liquid portion of blood

______k. State of chemical balance between a cell and its environment

______l. Agent which prevents or delays formation of blood

______m. Depression of body functions due to failure of circulation

______n. Abnormal discharge of blood either externally or internally

______o. White blood cells

______p. White blood cells having a lobed nucleus and granules in the cytoplasm

1. Hematology
2. Homeostasis
3. Gamma globulin
4. Erythrocytes
5. Leukocytes
6. Corpuscles
7. Granulocytes
8. Hemoglobin
9. Coagulation
10. Plasma
11. Transfusion
12. Hemorrhage
13. Lipid
14. Anemia
15. Shock
16. Bone marrow puncture
17. Hematocrit
18. Anticoagulant
19. Thrombus
20. Embolus

_____q. Injection of one person's blood into the blood vessels of another person

_____r. Oxygen-carrying protein pigment of the red blood cells

_____s. Any of a group of fat or fatlike substances which are insoluble in water

_____t. Insertion of hollow needle into marrow cavity of a flat bone to withdraw a sample of bone marrow

8. Name the general functions of blood.

a. ____________________

b. ____________________

c. ____________________

9. Select from the list below principal components of blood plasma by placing an "X" in the appropriate blanks.

_____a. Bile

_____b. Uric acid

_____c. Hormones and vitamins

_____d. Lipids

_____e. Carbohydrates, principally glucose

_____f. Heparin

_____g. Casts

_____h. Water

_____i. Crystals

_____j. Blood proteins

_____k. Mineral salts

_____l. Waste products

_____m. Gases (oxygen, nitrogen, and carbon dioxide)

_____n. Lactic acid

_____o. Vitamin K

10. Classify characteristics of blood cells in the list below. Place an "E" for erythrocytes, an "L" for leukocytes, and a "P" for platelets in the blanks provided.

    ______a. Fight infection

    ______b. Transport oxygen to cells and carbon dioxide from cells

    ______c. Are irregular in size and shape

    ______d. Can be seen in clusters

    ______e. Are colorless

    ______f. Are minute, disc-shaped cells that look alike or very similar

    ______g. Have an average life span of nine days

    ______h. Are very fragile and break easily under stress

    ______i. May move out of blood vessels by passing between cells of vessel walls

    ______j. Have an average life span of 120 days

    ______k. Remain in bloodstream unless a vessel is cut or ruptured

    ______l. Vary in shape and size

11. Select from the list below reasons for blood transfusions.

    ______a. To aid recovery as a preoperative or postoperative procedure

    ______b. To treat shock

    ______c. To treat anemia

    ______d. To increase energy

    ______e. To replace blood lost through hemorrhage

    ______f. To decrease blood pressure

    ______g. To improve physical appearance

    ______h. To exchange blood in certain blood disorders

12. Name the four blood groups.

    a. ____

    b. ____

    c. ____

    d. ____

13. Discuss the Rh factor.

14. Match routine blood studies on the right to their correct descriptions by placing the correct number in the appropriate blanks.

_____ a. Scientific study of serum

_____ b. Measures the total volume of red corpuscles (erythrocytes)

_____ c. Measures the total volume of white corpuscles (leukocytes)

_____ d. Measures the amount of pigment which contains iron in the red blood cells

_____ e. Measures levels of blood components from venous blood sample

1. Hemoglobin measurement
2. Total red cell count
3. Total white cell count
4. Serology
5. Blood chemistry tests

15. Name four less common blood tests done for more specific diagnoses.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

16. Match the normal ranges of blood tests in adults to their correct values by placing the appropriate numbers in the blanks provided.

_____ a. 12-18 gm%

_____ b. 38-50%

1. Erythrocytes
2. Leukocytes

______c. 5,000-10,000

______d. 200,000-400,000

______e. 4,500,000-5,000,000

3. Platelets

4. Hemoglobin

5. Hematocrit

17. Match the terms associated with heat and cold to their correct definitions by placing the appropriate numbers in the blanks provided.

______a. Death of a cell or group of cells

______b. Pertaining to the whole body rather than one of its parts

______c. Rays produced by the sun which provide heat; can be produced with special equipment

______d. Cloth, wet or dry, folded and applied firmly to a part of the body

______e. Introduction of dry or moist air or vapor into the lungs for therapeutic purposes

______f. Abnormal accumulation of blood in a body part

______g. Disease caused by a defect in the chemical processes of the cells of the body

______h. Invisible rays produced by the sun or with special equipment which cause tanning of the skin, kill bacteria, and aid in metabolism of vitamin D

______i. Freezing or the effect of freezing a part of the body

______j. Deliberate reduction of temperature in all or part of the body

______k. Formation or discharge of pus

______l. All the causes of a disease or abnormal condition

1. Suppuration
2. Metabolic disease
3. Necrosis
4. Hypothermia treatment
5. Infrared rays
6. Ultraviolet rays
7. Compress
8. Inhalation
9. Systemic
10. Frostbite
11. Congestion
12. Etiology

18. Distinguish between local effects of heat and cold by placing an "H" for heat and a "C" for cold in the blanks provided.

______a. Reduction of pain

______b. Decreased suppuration

______c. Constriction of blood vessels in area

______d. Prevention or decrease of swelling ______e. Increased blood supply

______f. Decreased inflammation

______g. Increased suppuration

______h. Decreased blood supply to part

______i. Dilation of blood vessels in area

______j. Diminished bleeding

______k. Reduction of sensation and lessening of pain with prolonged exposure

______l. Increased or decreased swelling depending upon etiology and stage or disease or injury

______m. Cooling of the part and eventually the body

19. Distinguish between systemic effects of heat and of cold by placing an "H" for heat and a "C" for cold in the blanks provided.

______a. Drowsiness

______b. Slowing of metabolism from prolonged application

______c. Reduction of blood loss

______d. Sense of well-being due to relief of pain

______e. Diminished blood supply to other parts of the body which may result in weakness, dizziness, or fainting

______f. Decreased tissue stress as a result of trauma

20. Distinguish between forms of heat by placing a "D" for dry heat and an "M" for moist heat in the blanks provided.

______a. Heat cradle

______b. Chemical hot pack

______c. Sitz bath

______d. Infrared and ultraviolet lamps

______e. Circulating water pad

______f. Warm water bottle

______g. Warm moist packs or compresses

______h. Electric pad

______i. Heat lamp

21. Distinguish between types of cold by placing a "D" for dry cold and an "M" for moist cold in the blanks provided.

    ______a. Alcohol, cool, or tepid sponge bath

    ______b. Cool vapor inhalation

    ______c. Chemical cold pack

    ______d. Ice bag

    ______e. Ice collar

    ______f. Cold moist packs or compresses

    ______g. Hypothermia blanket or mattress

22. Demonstrate the ability to:

    a Use a warm water bottle.

    b. Use an electric heating pad.

    c. Administer a chemical hot pack

    d. Use a heat lamp.

    e. Use a heat cradle.

    f. Apply warm, wet compresses.

    g. Assist with sitz bath.

    h. Use an ice bag or collar.

    i. Apply a chemical cold pack.

    j. Apply cold, moist packs.

    k. Give a cool or tepid sponge bath.

    (NOTE: If the above activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

CIRCULATORY SYSTEM
UNIT IX

ANSWERS TO TEST

1. a. 11
   b. 7
   c. 3
   d. 1
   e. 10
   f. 6
   g. 6
   h. 2
   i. 5
   j. 8
   k. 12
   l. 9
   m. 13
   n. 14
   o. 15
   p. 16
   q. 20
   r. 18
   s. 21
   t. 19
   u. 22
   v. 17
   w. 23
   x. 24

2. b, c, e, f

3. a. Left carotid artery
   b. Left subclavian artery
   c. Aorta
   d. Pulmonary artery
   e. Right pulmonary veins
   f. Left pulmonary veins
   g. Left atrium
   h. Pulmonary semilunar valve
   i. Aortic semilunar valve
   j. Bicuspid or mitral valve
   k. Left ventricle
   l. Pericardium
   m. Myocardium
   n. Endocardium
   o. Inferior vena cava
   p. Right ventricle
   q. Tricuspid valve
   r. Right atrium
   s. Superior vena cava
   t. Right subclavian artery
   u. Right carotid artery

4. Veins
   a. Superior vena cava
   b. Inferior vena cava
   c. Renal

d. Iliac

e. Femoral

f. Saphenous

g. Popliteal

h. Tibial

i. Jugular

j. Subclavian

k. Axillary

l. Brachial

m. Radial

n. Ulnar

Arteries

o. Aorta
p. Mesenteric
q. Iliac
r. Femoral
s. Popliteal
t. Tibial
u. Dorsalis pedis
v. Carotid
w. Subclavian
x. Axillary
y. Brachial
z. Renal
aa. Abdominal aorta
bb. Radial
cc. Ulnar

5. Arteries
    a. Carotid
    b. Temporal
    c. Facial
    d. Occipital
    e. Cerebral

    Veins
    a. Facial
    b. Temporal
    c. Occipital
    d. Cerebral

6. Any five of the following:
    a. Proper nutrition to maintain desirable weight for age and height
    b. Regular exercise
    c. Avoidance of sudden extremes in temperature
    d. Temperate habits in use of alcohol and tobacco
    e. Regular physical evaluation
    f. Prevention and care of infections
    g. Adequate rest
    h. Maintenance of good posture
    i. Avoidance of long periods of sitting with legs crossed
    j. Avoidance of wearing apparel which interferes with circulation

7. a. 19
    b. 14
    c. 3
    d. 9
    e. 20
    f. 6
    g. 1
    h. 4
    i. 17
    j. 10
    k. 2
    l. 18
    m. 15
    n. 12
    o. 5
    p. 7
    q. 11
    r. 8
    s. 13
    t. 16

8. a. Transportation
   b. Maintenance of homeostasis
   c. Resistance to infection

9 c, d, e, f, h, j, k, l, m, o

10. a. L
    b. E
    c. P
    d. P
    e. L
    f. E
    g. L
    h. P
    i. L
    j. E
    k. E
    l. L

11. a, b, c, e, h

12. a. O
    b. AB
    c. A
    d. B

13. Discussion should include the following:

    a. Approximately eighty-five percent of the population have a red blood cell protein called the Rh factor; these people are Rh positive

    b. Approximately fifteen percent of the population do not have this protein; these people are Rh negative

    c. When Rh positive blood is given to an Rh negative person, the recipient's Rh negative blood may produce counteracting proteins, called antibodies, which will destroy the red blood cells from the Rh positive blood; this does not happen when Rh negative blood is given to an Rh positive recipient

    d. An Rh negative mother may be sensitized by proteins if she carries an Rh positive baby

    e. During pregnancies following sensitization, the mother's antibodies may pass into the blood of the unborn infant and cause erythroblastosis fetalis, a destruction of red blood cells

14. a. 4
    b. 2
    c. 3
    d. 1
    e. 5

15. Any four of the following:
    a. Platelet count
    b. Blood sugar
    c. Clotting time and bleeding time
    d. Examination of blood of parasites
    e. Bone marrow puncture

16. a. 4
    b. 5
    c. 2
    d. 3
    e. 1

17. a. 3
    b. 9
    c. 5
    d. 7
    e. 8
    f. 11
    g. 2
    h. 6
    i. 10
    j. 4
    k. 1
    l. 12

18. a. H
    b. C
    c. C
    d. C
    e. H
    f. C
    g. H
    h. C
    i. H
    j. C
    k. C
    l. H
    m. C

19. a. H
    b. C
    c. C
    d. H
    e. H
    f. C

20. a. D
    b. D
    c. M
    d. D
    e. D
    f. D
    g. M
    h. D
    i. D

21. a. M
    b. M
    c. D
    d. D
    e. D
    f. D
    g. M

22. Performance skills evaluated to the satisfaction of the instructor

NUTRITION
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to name the four basic food groups, classify characteristics of five standard diets and complete a chart on diet modifications. The student also should be able to measure intake, serve and assist with meals, feed another person, and give tube feedings. This knowledge will be evidenced through completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with nutrition to their correct definitions.
2. Name functions of food.
3. Name reasons why good nutrition is essential.
4. Select from a list factors that influence food habits.
5. Name the basic nutrients.
6. Name the four basic food groups and the suggested servings of each.
7. Classify primary causes of nutritional deficiency.
8. Match terms associated with nutritional deficiency to their correct definitions.
9. Classify vitamins according to solubility.
10. Name the approximate number of calories in one gram of selected nutrients.
11. Match selected nutrients to the correct percentage needed in daily diet.
12. List factors that affect energy requirements.
13. Arrange in order steps in determining calorie requirements.
14. Match terms associated with evaluation of foods to their correct definitions.
15. Classify common types of poisoning by foods.

16. Classify illnesses transmitted through foods by animals, food handlers and shoppers, and improper preparation or storage of food.

17. Classify characteristics of the five standard diets.

18. Name purposes of a therapeutic diet.

19. Complete a chart on therapeutic or modified diets.

20. Match ways of administering fluids to patients to their correct definitions.

21. Distinguish between symptoms of edema and dehydration.

22. List health assistant responsibilities for the care of a patient with a feeding tube.

23. Write an essay on a current news item about nutrition.

24. Make a food poster.

25. Write menus for one week.

26. Measure intake.

27. Evaluate feeding a visually handicapped person.

28. Demonstrate the ability to:

    a. Serve and assist at mealtimes.

    b. Feed another person.

    c. Give tube feedings.

NUTRITION
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

   A. Provide students with objective sheet.

   B. Provide students with information, assignment, and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information sheet.

   F. Invite resource people to speak about food service careers and/or good nutrition.

      (NOTE: Use the visit as an activity for HOSA group.)

   G. Provide resource material for students to complete assignment sheets.

   H. Provide equipment and ample time to complete job sheets.

   I. Visit a dietician in a local hospital or nursing home.

   J. Use comparison cards from the National Dairy Council to show relative food values of familiar foods.

      (NOTE: Obtain educational material by writing to the Oklahoma Dairy Products Institute, 129 N.W. 44, Oklahoma City, Oklahoma 73109.)

   K. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Assignment sheets

      1. Assignment Sheet #1--Write an Essay on a Current News Item About Nutrition

      2. Assignment Sheet #2--Make a Food Poster

      3. Assignment Sheet #3--Write Menus for One Week

      4. Assignment Sheet #4--Measure Intake

      5. Assignment Sheet #5--Evaluate Feeding a Visually Handicapped Person

D. Job sheets

1. Job Sheet #1--Serve and Assist at Mealtimes

2. Job Sheet #2--Feed Another Person

3. Job Sheet #3--Give Tube Feedings

E. Test

F. Answers to test

III. Unit references:

A. Mitchell, Pamela H. *Concepts Basic to Nursing.* New York: McGraw-Hill Book Company, 1973.

B. Cherescavich, Gertrude D. *A Textbook for Nursing Assistants.* St. Louis: C.V. Mosby Company, 1973.

C. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

IV. Additional references:

A. Association--Oklahoma Dietetics Association, Career Guidance, Florence Chancey R.P., 7006 E. Reno, Apt. 131, Midwest City, OK 73110.

B. Films:

1. "Nutrition Sense and Nonsense." Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.

2. "Eat for Health." Oklahoma State Department of Health.

3. "Meals for Everyone." Oklahoma State Department of Health.

4. "An Outbreak of Salmonella Infections." Oklahoma State Department of Health.

5. "More than Food." Oklahoma State Department of Health.

C. Filmstrip--"Feeding the Patient." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

NUTRITION
UNIT I

INFORMATION SHEET

I. Terms and definitions

  A. Nutrition--Study of foods and their relation to health

  B. Nutrient--Chemical compound found in food

  C. Food--Substance that the body uses to yield energy, to build or repair tissues, and/or to regulate body processes

  D. Dietetics--Science which deals with the use of foods in health and disease

  E. Diet--Food and drink consumed each day

  F. Digestion--Process of changing food in the mouth, stomach, and intestines, so that it can be absorbed by the blood and used by the cells

  G. Amino acids--Chemical compounds which are components of proteins

  H. Hydrochloric acid--Normal constituent of gastric juices produced by glands in the stomach

  I. Lipid--Oily substance not soluble in water

  J. Dental caries--Gradual decay of enamel and dentin of a tooth

  K. Gram--Metric unit of weight

  (NOTE: A gram is approximately equal to fifteen grains.)

  L. Obesity--Condition in which there is an excessive amount of fat in the body

  M. Cholesterol--Fatlike, pearly substance found in animal fat, oils, brain tissue, milk, yolks of eggs, liver, kidneys, and adrenal glands

II. Functions of food

  A. Providing heat

  B. Promoting growth

  C. Repairing tissues

  D. Regulating body processes

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INFORMATION SHEET

III. Reasons why good nutrition is essential

   A. Promotes a healthier body and mind

   B. Provides greater personal energy and vitality

   C. Promotes resistance to illness

   D. Speeds healing

   E. Produces stronger bones and muscles

   F. Promotes good posture

   G. Helps individual feel and sleep better

IV. Factors that influence food habits

   A. Personal attitudes

   (NOTE: This includes your likes and dislikes of foods and the method of preparing them. Childhood training and family food preferences affect your attitude toward food.)

   B. Region and availability

   (NOTE: Certain areas of the country have characteristic foods, although there is a greater variety of foods due to increasing transportation facilities.)

   C. Income

   (NOTE: Lower income families spend proportionally more of their income for food.)

   D. Age

   (NOTE: Young, active people need high energy foods more than older, less active people.)

   E. Religious influence

   (NOTE: Various religions have diet restrictions which require special planning to assure adequate diet.)

   F. Pregnancy and lactation

   (NOTE: Pregnant women require additional nutrition, but not additional calories.)

   G. Nationality and race

   (NOTE: Food preference and preparation varies from one nation to another.)

INFORMATION SHEET

H. Advertisements

(NOTE: Communication about foods and food preparation methods in articles and on radio and television influence food habits.)

V. Basic nutrients

A. Protein

B. Carbohydrates

C. Fat

D. Minerals

E. Vitamins

F. Water

VI. Four basic food groups and suggested servings of each

(NOTE: The main part of the diet should be selected from the four basic food groups. Other foods may be added to make meals more appealing and satisfying.)

A. Milk--Two servings

(NOTE: Children and pregnant women need three to four servings; teenagers and lactating mothers need four or more servings.)

B. Meat--Two or more servings

C. Bread and cereal--Four or more servings

D. Fruit and vegetables--Four or more servings, including one citrus fruit

VII. Primary causes of nutritional deficiency

A. Inadequate intake

1. Poor food habits

2. Consumption of nutrient deficient food

3. Anorexia due to disease

4. Diarrhea

5. Alchoholism

(NOTE: Alcoholism may depress the appetite.)

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INFORMATION SHEET

6. Faulty therapeutic diet
7. Lack of proper food

B. Poor use of ingested food

1. Faulty absorption in the intestinal tract
2. Metabolic disturbances

   Example: Decreased insulin production

3. Disease of digestive tract
4. Food allergies

VIII. Terms and definitions associated with nutritional deficiency

A. Nutritional deficiency--Insufficient amount of one or more essential nutrients in diet

B. Malnutrition--Lack of necessary food substances in body

C. Anorexia--Lack or loss of appetite

D. Avitaminosis--Disease due to lack of vitamins in diet

E. Hypervitaminosis--Toxicity caused by excessive amounts of one or more vitamins

F. Rickets--Softened bone condition in children resulting from deficient deposits of calcium in bone-forming cartilages

G. Pellagra--Deficiency disease due to insufficient niacin and protein; characterized by dermatitis, diarrhea, anemia and mental symptoms

H. Scurvy--Deficiency disease due to insufficient vitamin C; characterized by loss of energy, pain in limbs, weakness, and edema

IX. Solubility of vitamins

A. Fat soluble

1. Vitamin A
2. Vitamin D
3. Vitamin E
4. Vitamin K

INFORMATION SHEET

B. Water soluble

1. Vitamin C

2. Vitamin B complex

(NOTE: Vitamin B complex includes thiamine, riboflavin, niacin, biotin, folic acid, pyridoxine, and cobalamin.)

X. Approximate number of calories in one gram of nutrients

A. Carbohydrate--Four

B. Protein--Four

C. Fat--Nine

XI. Percentages of nutrients needed in the daily diet

A. Carbohydrates--Forty to fifty percent

B. Protein--Ten to fifteen percent

C. Fat--Twenty-five to thirty percent

(NOTE: Most Americans have a fat intake of forty percent. In countries where fat intake is around twenty percent and more unsaturated fats are used, the incidence of atherosclerosis is less.)

XII. Factors that affect energy requirements

A. Physical activity

B. Age

C. Size

D. Sex

E. Endocrine secretions

F. Body temperature

G. Medications

H. Emotions

I. External climate

J. Sleep

K. Nutrition

L. Pregnancy

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INFORMATION SHEET

XIII. Steps in determining calorie requirements

A. Determine ideal weight

(NOTE: Tables giving desirable weights for adults are usually found in nutrition textbooks.)

B. Determine calories needed

(NOTE: A moderately active woman needs 18.0 calories per pound, a moderately active man needs 20.5 calories per pound, and a man doing strenuous labor may need up to 28.0 calories per pound of ideal weight.)

C. Multiply ideal weight by calories needed

Example: Ideal weight of moderately active woman	125 pounds x18 calories 2,250 calories per day

XIV. Terms and definitions associated with evaluation of foods

A. Condiment--Seasoning; ingredient added to enhance the flavor of food

B. Mislabeling--Incorrect or incomplete information on a label

C. Additive--Element added to natural food, usually to improve or preserve

D. Dehydrated--Pertaining to food with water removed

E. Restored--Food in which nutrients lost in processing are replaced

F. Fortified--Food with more nutrients added than it has in its natural state

G. Enriched--Food improved in nutritive value by adding vitamins and minerals during processing

H. Diet therapy--Modifications of patient's normal diet to meet requirements created by disease or injury

I. Intake and output--Accurate record of all liquids taken by patient and accurate measurement of all urine, vomitus, drainage, and other liquid lost from the body

J. Edema--Condition in which body tissues retain excessive amount of tissue fluid

K. Ascites--Excessive accumulation of fluid in peritoneal cavity

INFORMATION SHEET

L. Anuria--Suppression of urinary output

M. Oliguria--Diminished urinary output

N. Dehydration--Condition that results when fluid output exceeds fluid intake

O. Diaphoresis--Profuse perspiration

P. Diuretic--Agent or medication that increases urinary output

Q. Polyuria--Excessive secretion and excretion of urine

R. Graduate--Measuring device marked in cm^3 (cc's)

S. Tissue turgor--Fullness of tissue related to the amount of fluid surrounding the cells

T. Peritoneal cavity--Space between layers of peritoneum

XV. Common types of poisoning by foods

A. Foods with chemical poisons

1. Toxic mushrooms
2. Rhubarb leaves
3. Green part of white potatoes

B. Chemical poisons added to foods

1. Insecticides used to spray growing fruits or vegetables
2. Sprays and insecticides used in and around the home
3. Silver polishes which contain cyanide

C. Disease-producing organisms in foods

1. Products from diseased animals
2. Foods contaminated by food handlers
3. Foods improperly cooked or stored

XVI. Illnesses transmitted through foods

A. By animals

1. Tuberculosis

   Example: Infected cattle

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2. Dysentery

   Example: Contaminated milk

3. Scarlet fever

   Example: Unpasteurized milk

4. Streptococcal infection

   Example: Unpasteurized milk

5. Tularemia

   Example: Wild rabbits

6. Brucellosis

   Example: Flesh and meat of cattle, swine, or other animals

7. Worm infestation

   Example: Tapeworm from cattle, trichinosis from pork

8. Salmonella infections

   Example: Pork, poultry and eggs, foods contaminated by rats and mice

9. Infectious hepatitis

   Example: Contaminated food, seafood

B. By food handlers and shoppers

   1. Common colds
   2. Influenza
   3. Scarlet fever
   4. Diphtheria
   5. Tuberculosis
   6. Staphylococcal infections
   7. Intestinal pathogens
   8. Infectious hepatitis
   9. Typhoid fever

INFORMATION SHEET

C. Through improper preparation or storage of food

1. Staphylococcal infections

   Example: Precooked hams, milk, custards, cream fillings, and salads which have not been refrigerated properly

2. Streptococcal infections

   Example: Meat and poultry dressing improperly cooked

3. Clostridium perfringens

   Example: Vegetables improperly cleaned or canned

4. Botulism

   Example: Improperly canned vegetables

XVII. Standard diets

A. Clear or surgical liquid

1. Used after surgery or to replace fluids lost by vomiting or diarrhea

2. Composed mainly of water and carbohydrates; nutritionally inadequate

3. Includes tea or black coffee, fat-free broth, strained vegetables or fruit juices, gelatin, and carbonated beverages

B. Full or medical liquid

1. Used during acute infection for patients having difficulty chewing or swallowing and for those with gastrointestinal disturbances

   (NOTE: Diet may be used as a tube feeding using a nasogastric tube inserted into the stomach.)

2. May be used for an indefinite period if physical activity is limited; may be deficient in iron

3. May include all liquids, such as strained cream soups, milk, strained cereals, plain puddings, and plain ice cream and sherbet

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INFORMATION SHEET

C. Soft

1. Usually given between liquid and full diets for patients who need easily chewed foods
2. Can be planned to be nutritionally adequate
3. Includes all foods, except fried foods, nuts, whole-grain cereals or breads, fibrous vegetables, pastries, pickles, and tough meats

D. Light or convalescent

(NOTE: Many health care facilities omit soft or light diet classification because they are similar.)

1. Usually given to preoperative and postoperative patients and those with minor illnesses
2. Nutritionally adequate
3. Includes all foods, except fried foods, pastries, fibrous vegetables, and nuts

E. Full

(NOTE: This may be called general, regular, normal, or house diet.)

1. Used most frequently and given to all patients whose conditions do not require a special diet
2. Based on basic four food groups; normal diet
3. Includes all foods

   (NOTE: Some health care facilities restrict the amount of pastries, fried foods, strongly flavored vegetables, and highly seasoned foods.)

XVIII. Purposes of a therapeutic diet

A. Regulation of the amount of specific foods in metabolic disorders

B. Increase or decrease of body weight by adding or limiting calories

C. Prevention or restriction of edema by restricting sodium intake

D. Aiding digestion by avoiding foods that irritate the digestive tract

E. Assisting an organ to regain and/or maintain its normal function

INFORMATION SHEET

XIX. Therapeutic or modified diets

(NOTE: See following charts.)

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INFORMATION SHEET

DIET	FOODS ALLOWED	FOODS OMITTED	CONDITIONS
Low Carbohydrate	Only enough carbohydrates to maintain health and carry on activities Dietetic foods	Sugar and sugar-sweetened foods All jellies and candies Pastries and desserts Alcoholic beverages	Diabetes mellitus Hyperinsulinism (Nutritionally adequate)
Low Fat	Increased carbohydrates and proteins Skim milk Sherbert Minimum amount butter Vegetables and fruits as desired	All fats limited Fried foods Pork Ice cream, pastries	Gall bladder and liver disease Obesity Heart conditions (Deficient in fat soluble vitamins)
High Iron	Normal diet with high-iron foods Liver and organ meats Red meats All dried fruits Soybeans Molasses		Nutritional anemia Pernicious anemia (Nutritionally adequate)
Low Cholesterol	Lean muscle meats, fish Poultry (without skin or fat) Skim milk Margarine made of unsaturated fats Liquid vegetable oil	Organ meats Egg yolk Shellfish Desserts made with cream, whole milk Cream, butter	Atherosclerosis Coronary circulation disease (Nutritionally adequate)

INFORMATION SHEET

DIET	FOODS ALLOWED	FOODS OMITTED	CONDITIONS
High Calorie (4000 calories)	Emphasis on increase of calories rather than increase of nutrients Full meals with high calorie between-meal snacks	Fatty foods and bulky foods Foods patient dislikes	For persons ten percent of more below desired weight for age, height, and sex (Diet adequate in all nutrients)
High Protein (up to 100 grams)	Added amounts of meat, milk, cheese, eggs, fish and poultry Additional nonfat dry milk to increase protein without increasing fat	Fatty foods	Children and adolescents who need additional protein for growth Pregnancy and lactation Following surgery Illnesses resulting in protein loss (Nutritionally adequate)
Low Protein (approximately 40 grams)	One ounce daily--meat, poultry, fish, or cheese One egg daily Butter as desired Fruits and vegetables as desired One cup milk daily	Meat over one ounce Puddings unless made with milk allowance Cream soups unless prepared with milk allowance Dried peas and beans	Kidney conditions Liver ailments Heart conditions (Nutritionally inadequate in protein, calcium, iron and all vitamins except vitamin C)
High Carbohydrate	Emphasis on carbohydrate foods Full meals with high carbohydrate snacks	Fried foods Fatty meats Pastries Alcoholic beverages Spices and condiments	Preparation for surgery Kidney disease Toxemia of pregnancy Liver disease (Nutritionally adequate)

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INFORMATION SHEET

DIET	FOODS ALLOWED	FOODS OMITTED	CONDITIONS
High Residue	Increased whole grain cereals Increased fruits, vegetables		Atonic constipation Nutritionally adequate
Bland	Generous amounts of milk and protein foods Refined cereals Simple desserts Ripe banana, applesauce, baked apple, peaches pears Decaffeinated coffee, weak tea Carrots, beets, string beans, spinach, squash without seeds, asparagus tips, peas	Fried foods Meats with coarse fiber, tough gristle Coarse foods Highly seasoned foods Fruits and vegetables other than allowed Pastries and candies Alcoholic beverages	Gastric ulcer Spastic constipation Colitis (Nutrionally adequate if well planned)
Low Residue	Refined cereals, breads Soft cheese (cottage, cream) Tender meats Pureed vegetables Applesauce, canned peaches, pears, white cherries, pureed apricots, prunes, plums, fruit juices Plain pudding, angel cake, sponge cake	Fibrous meats Fresh fruits and vegetables Fried foods Whole grain cereals, breads Spices and condiments Pastries and candies Alcoholic beverages	Before and after intestinal surgery Severe diarrhea Colitis, diverticulitis Hemorrhoid (Deficient in vitamins)
Sodium Restricted	Natural foods prepared without salt Milk, meat in limited amounts Fruits and vegetables without salt Unsalted bread Desserts prepared without salt	Processed foods Salt, many seasonings Monosodium glutamate Baking power, baking soda Brine prepared foods Food preservatives containing sodium Cultured buttermilk	Kidney diseases Cardiovascular disorders Hypertension (Nutrionally adequate if well-planned)

INFORMATION SHEET

XX. Ways of administering fluids to patients

   A. Orally--Foods and fluids taken by mouth or gastric tube

   B. Intravenously--Fluids given into the vein

   C. Hypodermoclysis--Fluids given into the tissue under the skin; primarily used for giving fluids to infants and elderly people

XXI. Symptoms of edema and dehydration

   A. Edema

      1. Weight gain

      2. Swelling of tissues, particularly feet, ankles, face, and fingers

      3. Anuria

      4. Oliguria

   B. Dehydration

      1. Thirst

      2. Dry skin and mucous membranes

      3. Constipation

      4. Oliguria

      5. Fall in blood pressure with weak, rapid pulse

      6. Elevated temperature

      7. Loss of tissue turgor

      (NOTE: In severe dehydration, body fluid is pulled from peripheral tissues, leaving the skin loose and dry. When skin is pinched, it does not return to its original state, but remains in the folds or returns slowly.)

XXII. Health assistant responsibilities for care of a patient with a feeding tube

   A. Cleansing tubing of secretions and retaping as necessary

   (NOTE: Because tubing will cause excess secretions, it will need to be cleaned to prevent irritation to the patient's nose and face. Tape will also need to be changed periodically.)

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INFORMATION SHEET

B. Giving mouth care frequently because patient must use mouth breathing which causes dryness

C. Checking position of tube frequently

   (NOTE: Tube can accidently be coughed up or pulled up and out of the stomach, curling up at the back of the throat. If fluids were given, they could be aspirated into the trachea.)

NUTRITION
UNIT I

ASSIGNMENT SHEET #1--WRITE AN ESSAY ON A CURRENT NEWS ITEM ABOUT NUTRITION

Many current issues and problems concerning today's nutrition have been brought to the public's attention through the various news media. Some of the issues have been controversial and have been studied in depth by the government. Using various news sources, write an essay about a current article on nutrition that interests you.

Examples: Fad diets, dangers of additives, new foods, and new methods of preparing foods

(NOTE: This essay could also be used for HOSA contest depending on topic of contest material. Check with supervisor for information.)

NUTRITION
UNIT I

ASSIGNMENT SHEET #2--MAKE A FOOD POSTER

Collect items to make a food poster.

Materials: Pictures from magazines, pamphlets or newspapers

Scissors

Paste or glue

Heavy paper or poster board

Felt-tip pens for lettering

Other equipment as needed for individual creativity

Work in groups of three or four to prepare a food poster using one of the following subjects:

Principal sources of carbohydrates

Snack foods that are nutritious and those that contain mostly "empty" calories

Sources of incomplete proteins

Sources of complete proteins

Foods containing visible fats

Foods containing invisible fats

Four basic food groups (on one poster or on four separate posters)

(NOTE: Another subject may be selected with the approval of the instructor.)

NUTRITION
UNIT I

ASSIGNMENT SHEET #3--WRITE MENUS FOR ONE WEEK

Write menus for one week using the four basic food groups as guidelines.

NUTRITION
UNIT I

ASSIGNMENT SHEET #4--MEASURE INTAKE

(NOTE: Average oral intake for an adult is 2,000 to 3,000 cm^3 (cc) of fluid per day.)

Using the following materials: cups, bowls, glasses, pitcher, graduate, water, and ice chips, perform the tasks below.

(NOTE: Container sizes vary with each institution. The instructor will provide the correct measurements for the containers used. A standard of basic liquid measures is given below.)

U.S. Customary Liquid Measure
With Equivalent Metric Measurements

U.S. Customary		Metric
1/4 teaspoonful	=	1 cc
1 teaspoonful	=	4 cc
1 ounce	=	30 cc
1 cup	=	240 cc
1 pint	=	500 cc
1 quart	=	1,000 cc

1. Fill containers with water

2. Measure water from each container with the graduate and record below

   Juice glass______________ cm^3 (cc)

   Water glass______________ cm^3 (cc)

   Paper cup______________ cm^3 (cc)

   Soup bowl______________ cm^3 (cc)

   Pitcher________________ cm^3 (cc)

3. Fill a juice glass with ice chips, melt the chips, measure, and record below

   Juice glass of ice chips______________ cm^3 (cc)

   (NOTE: 1 oz. of ice usually equals 15 cc melted liquid. Take into consideration whether the ice is chipped or cubed.)

ASSIGNMENT SHEET #4

4. Figure intake for the meal described below using the measurements obtained above.

   (NOTE: Keep a paper and pencil at the patient's bedside to record intake and output. Most institutions will have their own forms to calculate the twenty-four hour amounts.)

   Soup--1/2 taken

   Milk--2/3 taken

   Juice--1 glass

   Jello--1 serving

   Ice chips--1/2 paper cup

   Coffee--1/3 cup

   Total Intake__________ cm^3 (cc)

(NOTE: Physician may restrict or encourage fluid intake; it is the health assistant's responsibility to know which has been ordered. When intake and output is ordered, accuracy is very important, and the patient and family should be informed of the procedure. Fluids which must be measured for output include urine, fluid from suction devices, vomitus, and estimated amounts of hemorrhage, drainage, or perspiration.)

NUTRITION
UNIT I

ASSIGNMENT SHEET #5-EVALUATE FEEDING A VISUALLY HANDICAPPED PERSON

Use the following items: cups, saucers, glasses, plates, bowls, dinnerware, and straws.

a. Ask your lab partner to let you apply a blindfold.

b. Blindfolded person may be in bed or sitting at table.

c. Soup or cereal may be used or other foods as desired. Fluids to be drunk should be put into a cup and glass.

d. Feed your partner using instructions from Job Sheet #2.

e. Describe to your partner the arrangement of food and utensils and assist him/her in eating

(NOTE: Describe the tray of food by referring to it as a clock.)

Examples: Pudding at 8 o'clock, potatoes at four o'clock

f. Change roles with your partner.

Describe below your feelings as you were feeding your lab partner.

Describe below your feelings as you were being fed by your partner.

NUTRITION
UNIT I

JOB SHEET #1--SERVE AND ASSIST AT MEALTIMES

I. Equipment

- A. Bedpan or urinal
- B. Mouthwash cup and kidney basin
- C. Washcloth and soap
- D. Diet tray with all necessary utensils

II. Procedure

- A. Before meal care
  1. Offer bedpan or urinal or assist to bathroom before mealtime
  2. Give mouth and hand care
     - a. Assist patient in rinsing mouth with mouthwash or clear water, if desired
     - b. Give patient warm washcloth with soap to cleanse hands before eating
  3. Position patient
     - a. Assist patient to sit up in chair, if possible
     - b. Elevate head of bed if patient must remain in bed, so patient can assume a sitting position of possible
     - c. Position overbed table for convenience of patient
  4. Prepare environment
     - a. Create attractive environment by putting away all other utensils
     - b. Place a fresh glass of water within patient's reach
- B. Preparation and serving of trays
  1. Check name and room number so each patient receives correct tray
  2. Serve only one tray at a time

JOB SHEET #1

3. Serve trays promptly so that foods are desirable temperature
4. Check each tray to see that it is complete
5. See that patient who should have a tray receives one
6. Serve patients who need to be fed after other patients so full attention can be given to feeding them

C. Assisting patient at mealtime

1. Place tray on table with main dish closest to patient
2. Remove food covers and set aside

   (NOTE: Lift the cover of the food away from patient.)

3. Help patient with cutting food, buttering bread, and pouring beverage as necessary; place food and communication device so they are within reach
4. Allow patient ample time to eat; stress importance of therapeutic diet, if necessary; if patient does not eat, try to determine reason
5. Avoid unnecessary interruptions during mealtime, such as giving medications or treatments
6. Ask dietician to talk with patient if there is a problem about diet

D. After meal care

1. Assist with mouth care
2. Straighten bed and remove crumbs
3. Place patient in a comfortable position; adjust communication device
4. Put food covers back on tray and return tray to proper place
5. Note and record amounts and kinds of food eaten

NUTRITION
UNIT I

JOB SHEET #2--FEED ANOTHER PERSON

I. Equipment--Food tray, including all utensils needed for mealtime

II. Procedure

A. Place patient in a comfortable position

B. Place tray where patient can see the food, if possible

C. Sit down while feeding patient, if possible

(NOTE: Person will be more relaxed if assistant is sitting.)

D. Describe each food to the visually handicapped patient

E. Place napkin under patient's chin

F. Fill fork or spoon only half full; avoid spilling

G. Feed slowly; alternate foods

H. Allow enough time between bites

I. Give liquids through drinking tube if possible; warn patient to take small sips if liquid is hot

J. Encourage patient to hold bread or drinking straw if able

NUTRITION
UNIT I

JOB SHEET #3--GIVE TUBE FEEDINGS

I. Equipment

- A. Pint container (pitcher)
- B. Asepto syringe
- C. Glass of tap water
- D. Chux or some type of protective pad

II. Procedure

(NOTE: Tube feedings are given to unconscious patients or those who can not swallow for various reasons.)

A. Check physician's orders to make sure the formula ordered is available and the amount is correct

(NOTE: Make sure that the diet kitchen has made the correct formula according to the doctor's orders. The physician will determine what type of liquid is needed according to nutrient content and calorie needs. Feeding times are usually at 8:00 a.m., 12 noon, and 9:00 p.m. unless otherwise ordered.)

B. Wash hands

C. Remove formula and pour correct amount into small pitcher and allow time to warm it to room temperature, approximately twenty minutes

D. Take pitcher with formula to bedside table on a tray that also contains Asepto syringe and glass of cool water

E. Identify patient and explain what is to be done

F. Adjust bed to semi-Fowler's position

G. Wash hands

H. Place protective covering on area under head of patient

I. Remove cap or plug from the end of the nasogastric tube

J. Immerse the tube in a glass of water

K. Begin the feeding if bubbles do not appear

JOB SHEET #3

L. Attach the barrel of Asepto syringe to end of the tube

M. Pinch tube off

(NOTE: This avoids pushing air from the syringe into the stomach.)

N. Pour tap water in the barrel of the Asepto syringe

(NOTE: Remember this water must be measured accurately.)

O. Release tubing and permit water to flow through tubing into stomach

(NOTE: This rinses the tube of secretions.)

P. Pour formula into barrel of Asepto before water is completely drained

Q. Continue pouring slowly until pitcher is empty

(NOTE: Observe patient's condition throughout procedure.)

R. Give cool water again through tubing to flush formula out, remembering to measure amount given

S. Plug or cap tubing and remove protective pad

T. Place patient in comfortable position

U. Record feeding on intake and output sheet

V. Remove tray and clean area

W. Check to see if there is adequate amount of formula for next feeding

NUTRITION
UNIT I

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with nutrition to their correct definitions by placing the correct numbers in the appropriate blanks.

_____a. Chemical compounds which are components of proteins

_____b. Condition in which there is an excessive amount of fat in the body

_____c. Process of changing food in the mouth, stomach, and intestines so that it can be absorbed by the blood and used by the cells

_____d. Food and drink consumed each day

_____e. Science which deals with the use of foods in health and disease

_____f. Oily substance not soluble in water

_____g. Study of foods and their relation to health

_____h. Substance that the body uses to yield energy, to build or repair tissues, and/ or to regulate body processes

_____i. Fatlike, pearly substance found in animal fat, oils, brain tissue, milk, yolks of eggs, liver, kidneys, and adrenal glands

_____j. Metric unit of weight

_____k. Normal constituent of gastric juices produced by glands in the stomach

_____l. Gradual decay of enamel and dentin of a tooth

_____m. Chemical compound found in food

1. Nutrition
2. Nutrient
3. Food
4. Dietetics
5. Diet
6. Digestion
7. Amino acids
8. Hydrochloric acid
9. Lipid
10. Dental caries
11. Gram
12. Obesity
13. Cholesterol

2. Name functions of foods.

   a. ____

   b. ____

   c. ____

   d. ____

3. Name four reasons why good nutrition is essential.

   a. ____

   b. ____

   c. ____

   d. ____

4. Select from the list below factors that influence food habits by placing an "X" in the appropriate blanks.

   ______a. Marital status

   ______b. Income

   ______c. Age

   ______d. Personal attitudes

   ______e. Nationality and race

   ______f. Religious influence

   ______g. Weather

   ______h. Region and availability

   ______i. Libido

   ______j. Genetic make-up

5. Name the basic nutrients.

   a. ____

   b. ____

   c. ____

   d. ____

   e. ____

   f. ____

6. Name the four basic food groups and the suggested servings of each.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

7. Classify primary causes of nutritional deficiency given below by placing an "I" for inadequate intake and a "U" for poor use of ingested food in the blanks provided.

______a. Food allergies

______b. Lack of proper food

______c. Alcoholism

______d. Metabolic disturbances

______e. Poor food habits

______f. Anorexia due to disease

______g. Disease of digestive tract

______h. Faulty therapeutic diet

______i. Diarrhea

______j. Faulty absorption in the intestinal tract

______k. Consumption of nutrient deficient food

8. Match terms associated with nutritional deficiency on the right to their correct definitions by placing the appropriate numbers in the blanks provided.

______a. Disease due to lack of vitamins in diet

______b. Lack of necessary food substances in body

______c. Deficiency disease due to insufficient vitamin C; characterized by loss of energy, pain in limbs, weakness, and edema

______d. Lack or loss of appetite

______e. Insufficient amount of one or more essential nutrients in diet

1. Nutritional deficiency
2. Malnutrition
3. Anorexia
4. Avitaminosis
5. Scurvy

_____f. Deficiency disease due to insufficient niacin and protein; characterized by dermatitis, diarrhea, anemia, and mental symptoms

_____g. Toxicity caused by excessive amounts of one or more vitamins

_____h. Softened bone condition in children resulting from deficient deposits of calcium in bone-forming cartilages

6. Rickets
7. Pellagra
8. Hypervitaminosis

9. Classify the vitamins listed below by placing an "F" for fat soluble vitamins and a "W" for water soluble vitamins in the blanks provided.

_____a. Vitamin A

_____b. Vitamin B complex

_____c. Vitamin C

_____d. Vitamin D

_____e. Vitamin E

_____f. Vitamin K

10. Name the appropriate number of calories in one gram of each nutrient listed below.

a. Protein--____

b. Carbohydrate--____

c. Fat--____

11. Match selected nutrients on the right to the correct percentage needed in the daily diet.

_____a. 10-15 percent

_____b. 25-30 percent

_____c. 40-50 percent

1. Carbohydrates
2. Protein
3. Fat

12. List five factors that affect energy requirements.

a. ____

b. ____

c. ____

d. ____

e. ____

13. Arrange in order the steps in determining calorie requirement by placing a "1" for the first step, a "2" for the second step, and so on in the blanks provided.

______a. Multiply ideal weight by calories needed

______b. Determine calories needed

______c. Determine ideal weight

14. Match terms associated with evaluation of foods to their correct definitions by placing the appropriate numbers in the blanks provided.

______a. Profuse perspiration

______b. Condition in which body tissues retain excessive amount of tissue fluid

______c. Food in which nutrients lost in processing are replaced

______d. Fullness of tissue related to amount of fluid surrounding the cells

______e. Incorrect or incomplete information on a label

______f. Diminished urinary output

______g. Excessive accumulation of fluid in peritoneal cavity

______h. Food improved in nutritive value by adding vitamins and minerals during processing

______i. Pertaining to food with water removed

______j. Seasoning; ingredient added to enhance flavor of food

______k. Agent or medication that increases urinary output

______l. Measuring device marked in cm^3 (cc's)

______m. Accurate record of all liquids taken by patient and accurate measurement of all urine, vomitus, drainage and other liquid lost from body

______n. Food with more nutrients added than it has in its natural state

______o. Element added to natural food usually to improve or preserve

1. Condiment
2. Mislabeling
3. Dehydrated
4. Restored
5. Enriched
6. Intake or output
7. Edema
8. Ascites
9. Oliguria
10. Diaphoresis
11. Diuretic
12. Graduate
13. Tissue turgor
14. Fortified
15. Additive

_____p. Modifications of patient's normal diet to meet requirements created by disease or injury

_____q. Space between layers of peritoneum

_____r. Supression of urinary output

_____s. Condition that results when fluid output exceeds fluid intake

_____t. Excessive secretion and excretion of urine

16. Diet therapy
17. Peritoneal cavity
18. Dehydration
19. Polyuria
20. Anuria

15. Classify common types of poisoning by foods by placing in the appropriate blanks an "F" for foods with chemical poisons, an "A" for chemical poisons added to foods, and a "D" for disease-producing organisms in food.

_____a. Silver polishes which contain cyanide

_____b. Foods improperly cooked or stored

_____c. Green part of white potatoes

_____d. Rhubarb leaves

_____e. Sprays and insecticides used in and around the house

_____f. Foods contaminated by food handlers

_____g. Insecticides used to spray growing fruits and vegetables

_____h. Products from diseased animals

_____i. Toxic mushrooms

16. Classify the following illnesses transmitted through foods by placing an "A" for illnesses transmitted by animals, an "FH" for illnesses transmitted by food handlers and shoppers, and an "IP" for illnesses transmitted through improper preparation or storage of food in the blanks provided. Each illness may have more than one classification.

_____a. Scarlet fever

_____b. Botulism

_____c. Typhoid fever

_____d. Tuberculosis

_____e. Dysentery

_____f. Clostridium perfringens

_____g. Staphylococcal infections

_____h. Salmonella infections

______i. Tularemia

______j. Diphtheria

______k. Brucellosis

______l. Common colds

______m. Influenza

______n. Worm infestation

______o. Infectious hepatitis

______p. Intestinal pathogens

______q. Streptococcal infections

______r. Staphylococcal infections

17. Classify the characteristics of the five standard diets listed below by placing a "CSL" for clear or surgical liquid diet, an "FML" for full or medical liquid diet, an "S" for soft diet, an "LC" for light or convalescent diet, and an "F" for full diet in the blanks provided.

______a. Can be planned to be nutritionally adequate

______b. Based on basic four food groups; normal diet

______c. Used during acute infection for patients having difficulty chewing or swallowing and for those with gastrointestinal disturbances

______d. Composed mainly of water and carbohydrates; nutritionally inadequate

______e. Nutritionally adequate

______f. Used after surgery or to replace fluids lost by vomiting or diarrhea

______g. May be used for an indefinite period if physical activity is limited; may be deficient in iron

______h. Usually given between liquid and full diets for patients who need easily chewed foods

______i. Usually given to preoperative and postoperative patients and those with minor illnesses

______j. Used most frequently and given to all patients whose condition does not require a special diet

______k. Includes all foods

______l. May include all liquids, such as strained cream soups, milk, strained cereals, plain puddings, and plain ice cream and sherbet

______m. Includes tea or black coffee, fat-free broth, strained vegetable or fruit juices, gelatin, and carbonated beverages ______n. Includes all foods, except fried foods, nuts, whole-grain cereals or breads, fibrous vegetables, pastries, pickles, and tough meats

______o. Includes all foods, except fried foods, pastries, fibrous vegetables, and nuts

18. Name purposes of a therapeutic diet.

a. ____

b. ____

c. ____

d. ____

e. ____

19. Complete the chart below on therapeutic or modified diets. Write the appropriate responses in the blanks provided.

DIET	FOODS ALLOWED	FOODS OMITTED	CONDITIONS
A	Only enough carbohydrate to maintain health and carry on activities Dietetic foods	Sugar and sugar-sweetened foods All jellies and candies Pastries and desserts Alcoholic beverages	Diabetes mellitus Hyperinsulinism (Nutritionally adequate)
Low Fat	Increased carbohydrates and proteins Skim milk Sherbet Minimum amount butter Vegetables and fruits as desired	B	Gall bladder and liver disease Obesity Heart conditions (Deficient in fat-soluble vitamins)
High Iron	Normal diet with high-iron foods Liver and organ meats Red meats All dried fruits Soybeans Molasses		C
Low Cholesterol	Lean muscle meats, fish Poultry (without skin or fat) Skim milk Margarine made of unsaturated fats Liquid vegetable oil	Organ meats Egg yolk Shellfish Desserts made with cream, whole milk Cream, butter	D
High Calorie (4000 calories)	Emphasis on increase of calories rather than increase of nutrients Full meals with high calorie between-meal snacks	E	For persons ten percent or more below desired weight for age, height, and sex (Diet adequate in all nutrients)
High Protein (up to 100 grams)	F	Fatty foods	Children and adolescents who need additional protein for growth Pregnancy and lactation Following surgery Illnesses resulting in protein loss (Nutritionally adequate)
G	One ounce daily meat, poultry, fish, or cheese One egg daily One cup milk daily Butter as desired Fruits and vegetables as desired	Meat over one ounce Puddings unless made with milk allowance Cream soups unless prepared with milk allowance Except dried peas and beans	Kidney conditions Liver ailments Heart conditions (Nutritionally inadequate in protein, calcium, iron, and all vitamins except vitamin C)
High Carbohydrate	H	Fried foods Fatty meats Pastries Alcoholic beverages Spices and condiments	Preparation for surgery Kidney disease Toxemia of pregnancy Liver disease (Nutritionally adequate)
High Residue	Increased whole grain cereals Increased fruits, vegetables	I	Atonic constipation (Nutritionally adequate)
Bland	Generous amounts of milk and protein foods Refined cereals Simple desserts Ripe banana, applesauce, baked apple, peaches, pears Decaffeinated coffee, weak tea Carrots, be[illegible]tring beans, spinach, s[illegible]h without seeds, asparagus [illegible] peas	Fried foods Meats with course fiber, tough gristle Coarse foods Highly seasoned foods Fruits and vegetables other than allowed Pastries and candies Alcoholic beverages	J
K	Refined cereals, breads Soft cheese (cottage, cream) Tender meats Pureed vegetables Applesauce, canned peaches, pears, white cherries, pureed apricots, prunes, plums, fruit juices Plain pudding, angel cake, sponge cake	Fibrous meats Fresh fruits and vegetables Fried foods Whole grain cereals, breads Spices and condiments Pastries and candies Alcoholic beverages	Before and after intestinal surgery Severe diarrhea Colitis, diverticulitis Hemorrhoid (Deficient in vitamins)
L	Natural foods prepared without salt Milk, meat in limited amounts Fruits and vegetables without salt Unsalted bread Desserts prepared without salt	Processed foods Salt, many seasonings Monosodium glutamate Baking powder, baking soda Brine prepared foods Food preservatives containing sodium Cultured buttermilk	Kidney diseases Cardiovascular disorders Hypertension (Nutritionally adequate if well planned)

20. Match ways of administering fluids to patients to their correct definitions by placing the appropriate numbers in the blanks provided.

______ a. Fluids given into the vein

______ b. Food and fluids taken by mouth or by gastric tube

______ c. Fluids given into the tissue under the skin; primarily used for giving fluids to infants and elderly persons

1. Orally
2. Intravenously
3. Hypodermoclysis

21. Distinguish between symptoms of edema and dehydration in the blanks provided by placing an "E" for edema symptoms and a "D" for dehydration symptoms. There may be more than one classification for each symptom.

______ a. Oliguria

______ b. Constipation

______ c. Dry skin and mucous membranes

______ d. Elevated temperature

______ e. Weight gain

______ f. Swelling of tissues, particularly feet, ankles, face, and fingers

______ g. Loss of tissue turgor

______ h. Fall in blood pressure with weak, rapid pulse

______ i. Anuria

______ j. Thirst

22. List health assistant responsibilities for care of a patient with a feeding tube.

a. ______________________________

b. ______________________________

c. ______________________________

23. Write an essay on a current news item about nutrition.

24. Make a food poster.

25. Write menus for one week.

26. Measure intake.

27. Evaluate feeding a visually handicapped person.

28. Demonstrate the ability to:

    a. Serve and assist at mealtimes.

    b. Feed another person.

    c. Give tube feedings.

(NOTE: If the above activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

NUTRITION
UNIT I

ANSWERS TO TEST

1. a. 7
   b. 12
   c. 6
   d. 5
   e. 4
   f. 9
   g. 1
   h. 3
   i. 13
   j. 11
   k. 8
   l. 10
   m. 2

2. a. Providing heat
   b. Promoting growth
   c. Repairing tissue
   d. Regulating body processes

3. Any four of the following:
   a. Promotes a healthier body and mind
   b. Provides greater personal energy and vitality
   c. Promotes resistance to illness
   d. Speeds healing
   e. Produces stronger bones and muscles
   f. Promotes good posture
   g. Helps individual feel and sleep better

4. b, c, d, e, f, h

5. a. Protein
   b. Carbohydrates
   c. Fat
   d. Minerals

e. Vitamins

f. Water

6. a. Milk--Two servings

   b. Meat--Two or more servings

   c. Bread and cereal--Four or more servings

   d. Fruit and vegetables--Four or more servings, including one citrus fruit

7. a. U

   b. I

   c. I

   d. U

   e. I

   f. I

   g. U

   h. I

   i. I

   j. U

   k. I

8. a. 4

   b. 2

   c. 5

   d. 3

   e. 1

   f. 7

   g. 8

   h. 6

9. a. F

   b. W

   c. W

   d. F

   e. F

   f. F

10. a. Four

    b. Four

    c. Nine

11. a. 2

    b. 3

    c. 1

12. Any five of the following:

    a. Physical activity

    b. Age

c. Size
d. Sex
e. Endocrine secretions
f. Body temperature
g. Medications
h. Emotions
i. External climate
j. Sleep
k. Nutrition
l. Pregnancy

13. a. 3
b. 2
c. 1

14. a. 10
b. 7
c. 4
d. 13
e. 2
f. 9
g. 8
h. 5
i. 3
j. 1
k. 11
l. 12
m. 6
n. 14
o. 15
p. 16
q. 17
r. 20
s. 18
t. 19

15. a. A
b. D
c. F
d. F
e. A
f. D
g. A
h. D
i. F

16. a. A, FH
b. IP
c. FH
d. A, FH
e. A
f. IP
g. FH
h. A
i. A
j. FH
k. A
l. FH
m. FH
n. A
o. A, FH
p. FH
q. A, IP
r. IP

17. a. S
    b. F
    c. FML
    d. CSL
    e. LC
    f. CSL
    g. FML
    h. S
    i. LC
    j. F
    k. F
    l. FML
    m. CSL
    n. S
    o. LC

18. a. Regulation of the amount of specific foods in metabolic disorders
    b. Increase or decrease of body weight by adding or limiting calories
    c. Prevention or restriction of edema by restricting sodium intake
    d. Aiding digestion by avoiding foods that irritate the digestive tract
    e. Assisting organ to regain and/or maintain its normal function

19. a. Low carbohydrate
    b. All fats limited; fried foods, pork, ice cream, pastries
    c. Nutritional anemia; pernicious anemia (nutritionally adequate)
    d. Atherosclerosis; coronary circulation diseases (nutritionally adequate)
    e. Fatty foods and bulky foods; foods patient dislikes
    f. Added amounts of meat, milk, cheese, eggs, fish, and poultry; additional nonfat dry milk
    g. Low protein (approximately 40 grams)
    h. Emphasis on carbohydrate foods; full meals with high carbohydrate snacks
    i. No foods are omitted
    j. Gastric ulcer; spastic constipation, colitis (nutritionally adequate if well planned)
    k. Low residue
    l. Sodium restricted

20. a. 2

    b. 1

    c. 3

21. a. E, D

    b. D

    c. D

    d. D

    e. E

    f. E

    g. D

    h. D

    i. E

    j. D

22. a. Cleansing tubing of secretions and retaping, as necessary

    b. Giving mouth care frequently because patient must use mouth breathing which causes dryness

    c. Checking position of tube frequently

23. Evaluated to satisfaction of instructor

24. Evaluated to satisfaction of instructor

25. Evaluated to satisfaction of instructor

26. Evaluated to satisfaction of instructor

27. Evaluated to satisfaction of instructor

28. Evaluated to satisfaction of instructor

PATIENT CLEANLINESS
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to demonstrate the ability to perform the necessary skills to insure patient cleanliness. This knowledge will be evidenced through completion of assignment and job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with patient cleanliness to their correct definitions.
2. Select from a list purposes of daily body care.
3. Distinguish between procedures included in patient care.
4. Demonstrate the ability to:
    a. Give a complete bed bath.
    b. Assist with or give a partial bath.
    c. Assist with a tub bath or shower.
    d. Give a back rub.
    e. Assist with mouth care.
    f. Comb hair.
    g. Shampoo hair.
    h. Shave a patient.
    i. Give care to an incontinent patient.

PATIENT CLEANLINESS
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information sheet.

   F. Demonstrate and discuss procedures outlined on job sheets.

   G. Observe return demonstrations.

   H. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Job sheets

      1. Job Sheet #1--Give A Complete Bed Bath

      2. Job Sheet #2--Assist With Or Give A Partial Bath

      3. Job Sheet #3--Assist With A Tub Bath Or Shower

      4. Job Sheet #4--Give A Back Rub

      5. Job Sheet #5--Assist With Mouth Care

      6. Job Sheet #6--Comb Hair

      7. Job Sheet #7--Shampoo Hair

      8. Job Sheet #8--Shave A Patient

      9. Job Sheet #9--Give Care To An Incontinent Patient

   D. Test

   E. Answers to test

III. Unit references:

- A. Culver, Vivian M. *Modern Bedside Nursing*. Philadelphia, Pennsylvania: W.B. Saunders Company, 1969.
- B. Rapier, Dorothy K., et. al. *Practical Nursing.* St. Louis, Missouri: The C.V. Mosby Company, 1970.
- C. Thompson, Ella M. and Rosdahl, Caroline B. *Textbook of Basic Nursing*. Philadelphia, Pennsylvania: J.B. Lippincott, 1973.
- D. *Nurse Assistant*. Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1971.

IV. Additional references--Donovan, J. *The Nurse Aid.* New York: McGraw-Hill, 1968.

V. Filmstrips:

- A. "Bed Bath." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.
- B. "Showers and Tub Baths." Trainex Corporation.
- C. "Personal Care in Long-Term Illness." Trainex Corporation.
- D. "Oral Hygiene." Trainex Corporation.

PATIENT CLEANLINESS
UNIT II

INFORMATION SHEET

I. Terms and definitions

- A. Ambulatory--Able to walk
- B. Anus--Opening of the rectum
- C. Axilla--Area under arm; armpit
- D. Buttocks--Prominence of gluteal muscles on the posterior part of the body at the hipline
- E. Contracture--Shortening or tightening of a muscle due to spasm, paralysis, or disease
- F. Decubitus ulcer--Lesion usually over a bony prominence due to local interference of circulation
- G. Denture--Complement of teeth, either natural or artificial; artificial replacement of one or more teeth, especially a set of false teeth
- H. Excoriation--Removal of areas of skin by trauma, scraping, or scratching
- I. Genitalia--Organs of the reproductive system, especially external organs
- J. Incontinence--Inability to retain urine or feces through loss of sphincter control
- K. Sitz tub--Tub in which patient sits immersing only hips and buttocks
- L. Sphincter--Circular muscle surrounding and closing an opening
- M. Tepid--Moderately warm or lukewarm
- N. Trauma--Wound or injury, especially those caused by external force
- O. Umbilicus--Small depression on abdomen marking the former attachment of the umbilical cord to the fetus

II. Purposes of daily body care

- A. Cleanses, refreshes, and soothes patient
- B. Stimulates circulation
- C. Improves elimination

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INFORMATION SHEET

D. Relaxes muscles

E. Prevents contractures with planned exercises

F. Aids in observation of patient's physical and mental status

G. Relieves restlessness

H. Aids in observation of patient's skin for pressure areas, bruises, excoriations, rashes, or other lesions

III. Procedures included in patient care

A. Morning care

1. Checking daily care plan

2. Bath

   (NOTE: Type of bath given depends upon patient's physical and mental condition and physician's order.)

3. Mouth care

   (NOTE: Whenever possible, patient will help with mouth care or take care of it alone. Feeble, helpless, or unconscious patients need mouth care as much or even more than patients who can assist in their own care.)

4. Care of fingernails and toenails

5. Care of hair and scalp

6. Shaving the patient

   (NOTE: Determine institutional policy if patient is unable to take care of personal hygiene procedures without assistance)

7. Back care

8. Bedmaking

9. Providing fresh drinking water, unless contraindicated

10. Positioning and exercise, as ordered or required

    (NOTE: When moving patients, support joints as necessary.)

11. Additional care, as required or ordered

INFORMATION SHEET

B. Evening care

  1. Partial bath, as needed
  2 Back care
  3. Straightening and changing linen, as needed
  4. Providing fresh drinking water
  5. Mouth care

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PATIENT CLEANLINESS
UNIT II

JOB SHEET #1--GIVE A COMPLETE BED BATH

I. Equipment needed

- A. Bed linen
- B. Bath blanket or cover
- C. Bath basin with water 39.3°C (105°F) to 46.1°C (115°F)
- D. Soap and soap dish
- E. Washcloth
- F. Face towel
- G. Bath towel
- H. Gown
- I. Lotion
- J. Equipment for mouth care
- K. Equipment for nail care
- L. Brush and comb
- M. Linen receptacle
- N. Damp cloth
- O. Waste receptacle
- P. Sign for door

II. Procedure

- A. Check room temperature

  (NOTE: Temperature should be 23.9°C (75°F) to 26.7°C (80°F) and room should be free of drafts.)

- B. Put sign on door of patient's room
- C. Identify patient and explain procedure
- D. Provide privacy
- E. Offer bedpan or urinal
- F. Wash your hands

JOB SHEET #1

G. Assemble equipment needed and take to bedside; arrange linen in order of use

H. Assist with mouth care; assist with shaving as needed

I. Lower backrest and side rails; if two pillows are being used, remove one

J. Loosen top bedding; remove spread and blanket; fold and place them on back of chair

K. Place bath blanket over top sheet; have patient hold on to top edge while sheet is fanfolded to end of bed and removed

L. Fold sheet and place on back of chair

M. Remove patient's gown or pajamas; have patient move to side of bed toward you

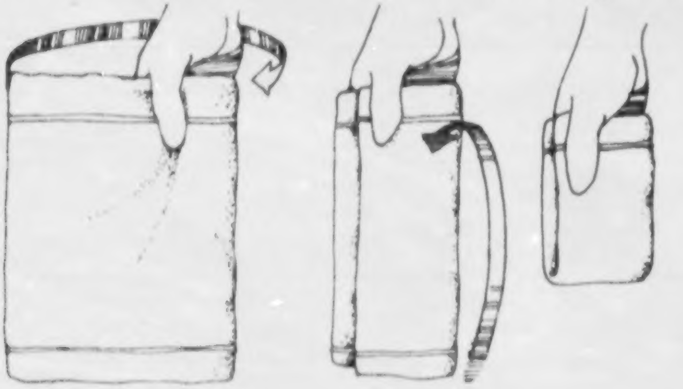
N. Give bath

  1. Face, neck, and ears

    a. Place face towel across upper edge of bath blanket

    b. Fold washcloth around hand to form a mitten (Figure 1)

FIGURE 1



Used by permission of W. B. Saunders Co., from *Modern Bedside Nursing* by Vivian M. Culver, 7th ed., copyright 1969, p. 802.

    c. Wash eyes with washcloth, cleansing from inner corner to outside using separate part of cloth for each eye and dry with towel

    (NOTE: Do not use a soapy cloth.)

    d. Wash face, neck, and ears; rinse and dry with face towel

    (NOTE: Have patient wash face, neck, and ears if condition permits.)

JOB SHEET #1

2. Arms
    a. Expose only one arm at a time; place bath towel under arm farthest from you
    b. Wash arm with soapy washcloth; rinse and dry, giving special care to axilla
    c. Repeat procedure on other arm
    d. Have patient place hands in bath basin and wash and dry them well
    e. Clean and file nails, if necessary
3. Chest and abdomen
    a. Place bath towel across chest
    b. Fold bath blanket to waist; wash chest and breasts under towel, rinse, and dry well

       (NOTE: Pay special attention to women with pendulous breasts.)
    c. Turn bath towel lengthwise to cover chest and abdomen; fold blanket to pubic area; wash, rinse, and dry abdomen
    d. Replace bath towel with bath blanket
4. Legs
    a. Drape patient with bath blanket exposing lower leg and thigh farthest from you

       (NOTE: Do not reach across a clean area.)
    b. Place bath towel lengthwise under leg
    c. Wash, rinse, and dry leg
    d. Place basin on towel and put patient's foot in basin; wash well between toes and dry thoroughly
    e. Repeat procedure on other leg, thigh, and foot
5. Change water
6. Back
    a. Turn patient on side or abdomen
    b. Fold blanket so that back and buttocks are exposed
    c. Place bath towel on bed along patient's back

JOB SHEET #1

d. Bathe, rinse, and dry back

e. Bathe, rinse, and dry buttocks

f. Rub back with lotion, giving special care to reddened areas over bony prominences

7. Completing bath

   a. Instruct patient to wash genital area

   b. Place basin within reach of patient

   (NOTE: If patient is unable to finish bath, health assistant will wash genital area.)

O. Assist patient in dressing and grooming

   1. Put on clean gown or pajamas
   2. Place a hand towel over pillow and comb hair for helpless patient
   3. Assist patient as needed with cosmetics

P. Care for patient's environment

   1. Empty bath basin; clean and return all bathing equipment to bedside stand
   2. Change bed linens
   3. Replace clean towels and washcloth
   4. Place communication device and bedside stand within reach of patient
   5. Place waste receptacle conveniently
   6. Damp dust overbed, table, and bedside cabinet
   7. Discard soiled linen
   8. Remove sign from door

Q. Wash hands

R. Report and record care and observations

PATIENT CLEANLINESS
UNIT II

JOB SHEET #2--ASSIST WITH OR GIVE A PARTIAL BATH

I. Equipment needed

- A. Basin with warm water between 39.3°C (105°F) and 46.1°C (115°F)
- B. Equipment for mouth care
- C. Toilet articles, including appropriate shaving equipment
- D. Lotion
- E. Soap and soap dish
- F. Washcloth and towel
- G. Bath blanket or cover
- H. Linen for bed change
- I. Linen receptacle
- J. Damp cloth
- K. Waste receptacle
- L. Sign for door

II. Procedure

- A. Check room temperature

  (NOTE: Temperature should be 23.9°C (75°F) to 26.7°C (30°F) and room should be free of drafts.)
- B. Put sign on door of patient's room
- C. Identify patient and explain procedure
- D. Provide privacy
- E. Wash hands
- F. Offer bedpan or urinal
- G. Wash hands
- H. Assemble equipment and take to bedside
- I. Remove top bedding and replace with bath blanket; remove patient's gown

JOB SHEET #2

J. Give patient ample time to bathe

K. Bathe legs if patient is unable to do so

L. Obtain clean water; wash back and buttocks

M. Give back rub

N. Assist patient in dressing and grooming

(NOTE: If permitted, assist patient to sit in chair while bed is being made.)

O. Care for patient's environment

1. Change bed linens
2. Leave all desired articles within reach of patient
3. Place communication device within convenient reach of patient
4. Clean and dry utensils and return to bedside stand
5. Replenish towels and washcloth
6. Place waste receptacle conveniently
7. Damp dust patient's unit
8. Remove sign from door

P. Wash hands

Q. Report and record care and observations

PATIENT CLEANLINESS
UNIT II

JOB SHEET #3--ASSIST WITH A TUB BATH OR SHOWER

I. Equipment needed

- A. Face towel
- B. Two bath towels
- C. Washcloth
- D. Dish with soap
- E. Nonskid bath mat
- F. Bath mat
- G. Bath blanket or cover
- H. Gown, robe, slippers, and shower cap, if needed
- I. Bath thermometer
- J. Lotion and deodorant
- K. Chair or stool
- L. Sign for bathroom door

II. Procedure

- A. Prepare bathroom and assemble equipment
    1. Have bathroom warm, but well-ventilated for comfort and safety
    2. Clean bathtub or shower thoroughly
    3. Place nonskid bath mat in tub or shower
    4. Fill tub about half full of water 35°C (95°F) to 39.3°C (105°F) or adjust shower water flow

       (NOTE: If no bath thermometer is available, test water temperature with elbow; water should be tepid.)
    5. Place bath mat on floor beside tub or shower
    6. Place sign on bathroom door

JOB SHEET #3

B. Prepare patient

   1. Escort patient to bathroom

   2. Explain communication device

   3. Help patient undress, if necessary

   4. Instruct patient to leave bathroom door unlocked

C. Assist patient with bath or shower

   1. Assist patient into tub or shower

   2. Wash back and/or assist, as indicated

   3. Observe patient for any unusual symptoms

      (NOTE: Check patient frequently if left in bathroom alone. Patient's bed could be made at this time if it is close to the bathroom.)

   4. Do not leave patient in tub or shower longer than eight to ten minutes without doctor's permission

D. Place opened bath blanket on chair or stool beside tub

E. Allow water to run out of tub or shut off shower water flow

F. Assist patient out of tub or shower

   1. Seat patient on stool; wrap bath blanket around lower part of body

   2. Dry skin by brisk use of towel, or firm patting motion if patient's skin is dehydrated, loose, and dry

G. Help patient dress

   1. Help patient into fresh dry clothing

   2. Return patient to unit and help into clean bed

H. Check bathroom

   1. Place towels, washcloth, and bath mat in hamper

   2. Clean tub or shower thoroughly

   3. Ventilate room

JOB SHEET #3

4. Leave bathroom tidy

5. Remove sign from door

I. Care for patient's environment

1. Leave all desired articles within reach of patient

2. Place communication device within convenient reach of patient

3. Place clean towels and washcloth in bedside table

4. Damp dust patient's unit

5. Place waste receptacle conveniently

J. Wash hands

K. Report observations to supervisor

L. Report and record care and observations

PATIENT CLEANLINESS
UNIT II

JOB SHEET #4--GIVE A BACK RUB

I. Equipment needed

  A. Bath towel

  B. Lotion

  C. Washcloth

  D. Basin with warm water

  E. Soap and soap dish

II. Procedure

  A. Wash hands

  B. Assemble equipment

  C. Identify patient and explain procedure

  D. Provide privacy

  E. Assist patient

    1. Have patient turn on side

    2. Place bath towel close to patient's back to protect bedding

  F. Give back care

    1. Wash, rinse, and dry back

    2. Warm lotion by rubbing it in hands first or by setting lotion container in warm water

    3. Apply lotion to entire back, beginning at lumbosacral area; apply up both sides of spinal column to neck, across shoulders, and down to lumbosacral area (Figure 1)

    4. Give attention to bony prominences, reddened areas, or pressure areas

  G. Give after care

    1. Adjust bed covers; assist patient to comfortable position

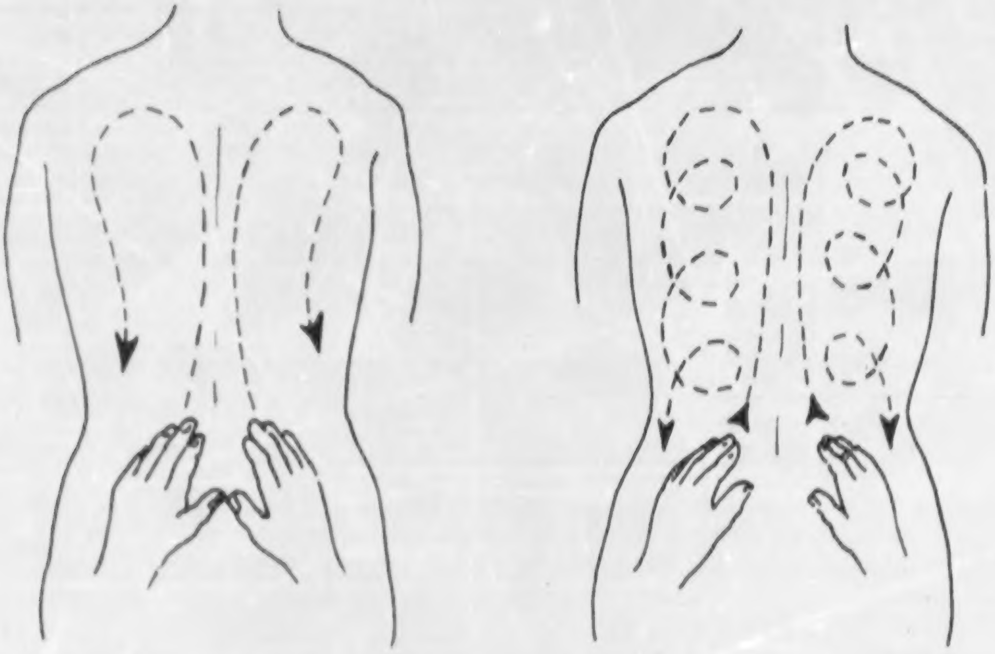
    2. Remove equipment, clean, and return to proper place

JOB SHEET #4

H. Wash hands

I. Report and record procedure and observations

FIGURE 1



Long Strokes

Circular Strokes

PATIENT CLEANLINESS
UNIT II

JOB SHEET #5--ASSIST WITH MOUTH CARE

I. Equipment needed

- A. Toothbrush
- B. Dentrifice or toothpaste
- C. Mouthwash solution
- D. Emesis basin
- E. Mouthwash cup
- F. Drinking tube
- G. Face towel
- H. Tissues
- I. Washcloth
- J. Denture cup, if needed

II. Procedure

- A. Identify patient and explain procedure
- B. Provide privacy
- C. Wash hands
- D. Assemble equipment
- E. Prepare patient
  - 1. Raise head of bed, as permitted
  - 2. Place towel over chest to protect gown and bed covers
  - 3. Place needed equipment on overbed table
- F. Proceed with oral care
  - 1. Pour water over toothbrush, add dentrifice or toothpaste, and give toothbrush to patient for brushing
  - 2. Hold emesis basin under chin
  - 3. Have patient rinse mouth with mouthwash solution and fresh water

JOB SHEET #5

G. Dry patient's face; remove towel

III. Procedure for helpless or unconscious patient

A. Identify patient and explain procedure

B. Provide privacy

C. Wash hands

D. Prepare patient

1. Turn patient's head to one side
2. Place towel under chain and to side of face
3. Place emesis basin under mouth
4. If necessary, use padded tongue depressor to hold patient's mouth open; DO NOT USE YOUR FINGERS

E. Moisten applicators with solution

(CAUTION: Squeeze excess moisture againt side of mouth cup to prevent patient from gagging and/or aspirating fluid.)

F. Cleanse upper and lower gums, teeth, and tongue

1. Hold cheek open with tongue depressor
2. Use proper stroke from gum line to apex of mouth
3. Using applicators, clean systematically from left side of mouth to front
4. Discard applicators and tongue depressor
5. Repeat from right side to front of mouth using fresh applicators and tongue depressor
6. Discard applicators and tongue depressor
7. Swab tongue from base to tip gently to prevent gagging

G. Apply lubricant on applicator to lips and outer areas of mouth

1. Lubricant prevents chapping and promotes healing
2. Vaseline, or glycerine and lemon mixture may be used

JOB SHEET #5

H. Care for equipment

  1. Rinse toothbrush thoroughly and return to bedside stand

  2. Empty emesis basin, wash, rinse, dry, and return to designated area

I. Make patient comfortable

J. Wash hands

K. Report and record care and observations

IV. Procedure for cleansing dentures

A. Identify patient and explain procedure

B. Provide privacy

C. Wash hands

D. Assist patient in removing dentures; place dentures in denture cup

(NOTE: Use 4 x 4's to hold dentures while removing them.)

E. Have patient rinse mouth with water or mouthwash solution

F. Clean dentures thoroughly with brush and dentrifice, holding dentures over basin of water

(CAUTION: Use cool or slightly warm water. Hot water may cause dentures to crack or break. If dentures accidently slip from your hands, the fall would be cushioned by water in the basin so they would not break.)

G. Place dentures in a denture cup containing fresh mouthwash solution or water

H. Wash hands

I. Return dentures to patient; assist in replacing them

J. Leave dentures in solution in a denture cup marked with patient's name, if not returned to patient's mouth

K. Wash hands

L. Report and record procedure

PATIENT CLEANLINESS
UNIT II

JOB SHEET #6--COMB HAIR

I. Equipment needed

  A. Towel

  B. Comb

  C. Brush

II. Procedure

  A. Wash hands

  B. Identify patient and explain procedure

  C. Provide privacy

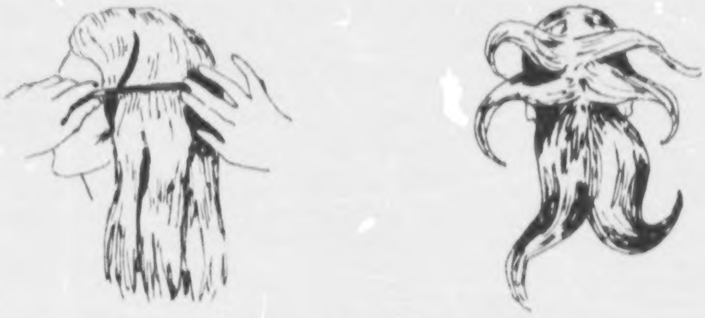
    1. Assist patient into comfortable position

    2. Place towel under head, if in bed, or around shoulders, if in chair

  D. Part hair in sections (Figure 1)

  (NOTE: If hair is long, begin at botton and work towards crown.)

FIGURE 1



    1. Comb or brush each section, holding hair with one hand near head using slow, even strokes to avoid pulling

    2. Wet matted hair with alcohol to aid in combing

    3. Part and arrange hair according to wishes of patient

  E. Observe condition of scalp and hair; report any unusual finding to supervisor

  F. Wash hands

  G. Record and report procedure and observations

PATIENT CLEANLINESS
UNIT II

JOB SHEET #7--SHAMPOO HAIR

I. Equipment needed

A. Shampoo board or waterproof sheet

B. Large pitcher

C. Small pitcher

D. Large basin

E. Waterproof protection for pillow

F. Soap solution or shampoo

G. Newspaper

H. Bath towels

I. Hair dryer, if available

II. Procedure

A. Wash hands

B. Identify patient and explain procedure

C. Provide privacy

D. Prepare patient and unit

1. Place bucket on newspaper covered chair at head of bed

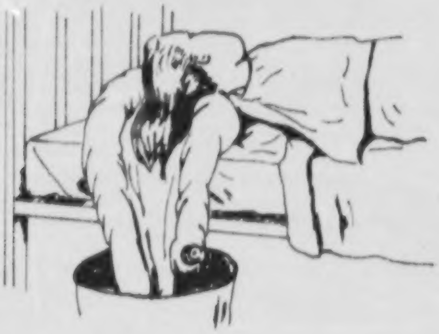
2 Lower backrest of bed and place protective pillow covered with bath towel under patient's head and shoulders

JOB SHEET #7

3. Place shampoo board under head of patient directing board's end into bucket on chair

   (NOTE: If shampoo board is not available, place waterproof sheet over pillow; roll side edges of sheet to form a trough. See Figure 1.)

FIGURE 1



4. Cover patient with bath blanket

5. Fanfold top bedding to foot of bed

E. Give shampoo

   1. Hold pitcher at side of head so that solution is not spilled in face

   2. Wet hair by pouring small amount of soap solution or shampoo over head

   3. Lather and massage scalp well, using fingers

   4. Rinse by pouring water from pitcher over hair

   5. Repeat lathering and massaging until hair is clean

   6. Rinse and repeat until clear of soap

F. Dry hair

   1. Dry forehead and ears with towel

   2. Wrap head in towel

   3. Remove shampoo board or waterproof sheet and towel from under head

   4. Make patient comfortable

JOB SHEET #7

    5. Brush and comb hair
    6. Complete drying with dryer or towel
  G. Make patient comfortable
    1. Replace gown, if wet
    2. Replace bath blanket with top bedding
    3. Change pillowcase
    4. Straighten unit; place communication device within reach of the patient
  H. Remove equipment
    1. Wash, rinse, and dry shampoo board and pitchers
    2. Return to proper place
  I. Wash hands
  J. Report and record care and observations
III. Procedure using dry shampoo--Follow manufacturer's instructions

PATIENT CLEANLINESS
UNIT II

JOB SHEET #8--SHAVE A PATIENT

I. Equipment needed

- A. Basin of hot water
- B. Shaving cream or soap
- C. Safety razor
- D. Aftershave lotion or body lotion
- E. Tissues
- F. Mirror
- G. Face powder
- H. Face towel

II. Procedure

- A. Wash hands
- B. Prepare patient
    1. Explain procedure to patient
    2. Spread towel under area to be shaved
- C. Prepare equipment
    1. Adjust light so that it shines on area to be shaved
    2. Assemble and place equipment on bedside table
- D. Shave patient
    1. Pat some warm water on area to soften
    2. Apply shaving soap or lather generously
    3. Hold skin taut with fingers of one hand as you shave in the direction that hair grows
    4. Use short strokes and observe for any growths, such as moles or warts

JOB SHEET #8

E. Complete aftershave care

  1. Wash shaved area to remove remaining soap or later
  2. Apply antiseptic, if skin has been nicked
  3. Apply aftershave, body lotion, or powder if patient desires

F. Care for equipment

  1. Wash, rinse, and dry razor and other equipment
  2. Replace equipment in proper place

G. Wash hands

H. Report and record procedure

PATIENT CLEANLINESS
UNIT II

JOB SHEET #9--GIVE CARE TO AN INCONTINENT PATIENT

I. Equipment needed

  A. Bed linen, as needed

  B. Bath blanket or cover

  C. Bath towels

  D. Washcloths

  E. Bedpan

  F. Toilet tissue

  G. Incontinent pads

  H. Gown or pajamas

  I. Disposable plastic bag

II. Procedure

  A. Wash hands

  B. Assemble equipment

  C. Identify patient and explain procedure

  D. Provide privacy

  E. Replace top bedding with bath blanket or cover

  F. Remove patient's gown or pajamas

  G. Turn patient on side, fold back bath blanket exposing area to be washed

  H. Remove soiled pad and place in disposable plastic bag

  I. Loosen drawsheet from under mattress, if wet or soiled, and tuck toward patient, keeping soiled part inside

  J. Wipe anal area with tissue and place in plastic bag

  K Wash and dry buttocks, thighs, and genital area

JOB SHEET #9

L. Rub back and buttocks with lotion

(NOTE: This improves circulation, protects the skin, and prevents pressure areas.)

M. Change bed linens

1. Change drawsheet
2. Place incontinent pad under buttocks
3. Have patient turn onto clean side of bed and go to other side of bed
4. Remove soiled drawsheet, straighten out incontinent pad, and tuck clean drawsheet under mattress

N. Complete care of patient

1. Put on gown or pajamas
2. Straighten top bedding and remove bath blanket
3. Place patient in comfortable position

O. Straighten unit

1. Empty bath basin
2. Discard soiled linen

   (NOTE: Care of soiled linen will depend on particular institutional policy; the supervisor can provide this information.)

P. Wash hands

Q. Record care and observations

HSC - 89-D

PATIENT CLEANLINESS
UNIT II

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with patient cleanliness to their correct definitions by placing the correct numbers in the appropriate blanks.

______a. Moderately warm or lukewarm

______b. Able to walk

______c. Opening of the rectum

______d. Tub in which the patient sits immersing only hips and buttocks

______e. Organs of the reproductive system, especially external organs

______f. Inability to retain urine or feces through loss of sphincter control

______g. Removal of areas of skin by trauma, scraping, or scratching

______h. Area under arm; armpit

______i. Shortening or tightening of a muscle due to spasm, paralysis, or disease

______j. Prominence of gluteal muscles on the posterior part of the body at the hipline

______k. Lesion usually over a bony prominence due to local interference of circulation

______l. Small depression on abdomen marking the former attachment of the umbilical cord to the fetus

______m. Circular muscle surrounding and closing an opening

______n. Complement of teeth, either natural or artificial; artificial replacement of one or more teeth, especially a set of false teeth

______o. Wound or injury, especially those caused by external force

1. Incontinence
2. Denture
3. Genitalia
4. Trauma
5. Contracture
6. Tepid
7. Sphincter
8. Sitz tub
9. Umbilicus
10. Anus
11. Excoriation
12. Buttocks
13. Ambulatory
14. Axilla
15. Decubitus ulcer

2. Select from the list below purposes of daily body care. Place an "X" in the appropriate blanks.

______a. Contracts muscles

______b. Relieves restlessness

______c. Aids in observation of patient's physical and mental status

______d. Maintains homeostasis

______e. Stimulates circulation

______f. Cleanses, refreshes, and soothes patient

______g. Elevates temperature

______h. Improves elimination

______i. Increases contractures

______j. Aids in observation of patient's skin for pressure areas, bruises, excoriations, rashes, or other lesions

3. Distinguish between procedures included in patient care. Place an "M" for morning care procedures and an "E" for evening care procedures in the appropriate blanks. Some procedures may be performed in both morning and evening care.

______a. Partial bath, as needed

______b. Back care

______c. Providing fresh drinking water, unless contraindicated

______d. Care of hair and scalp

______e. Mouth care

______f. Shaving the patient

______g. Providing fresh drinking water

______h. Bath

______i. Checking daily care plan

______j. Positioning and exercise, as ordered or required

______k. Care of fingernails and toenails

______l. Bedmaking

______m. Straightening and changing linen, as needed

______n. Additional care, as ordered

4. Demonstrate the ability to:
    - a. Give a complete bed bath.
    - b. Assist with or give a partial bath.
    - c. Assist with a tub bath or shower.
    - d. Give a back rub.
    - e. Assist with mouth care.
    - f. Comb hair.
    - g. Shampoo hair.
    - h. Shave a patient.
    - i. Give care to an incontinent patient.

(NOTE: If the above activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

PATIENT CLEANLINESS
UNIT II

ANSWERS TO TEST

1. a. 6
   b. 13
   c. 10
   d. 8
   e. 3
   f. 1
   g. 11
   h. 14
   i. 5
   j. 12
   k. 15
   l. 9
   m. 7
   n. 2
   o. 4
2. b, c, e, f, h, j
3. a. E
   b. E, M
   c. M
   d. M
   e. E, M
   f. M
   g. E
   h. M
   i. M
   j. M
   k. M
   l. M
   m. E
   n. M
4. Performance skills evaluated to the satisfaction of the instructor

THE PATIENT'S ENVIRONMENT AND BEDMAKING
UNIT III

UNIT OBJECTIVE

After completion of this unit, the student should be able to select from a list environmental factors that affect the patient's well-being and safety responsibilities of health assistants. The student should also be able to demonstrate the ability to make various types of beds and set up a unit for a patient. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with the patient's environment and bedmaking to their correct definitions.
2. Select from a list environmental factors that affect the patient's well-being.
3. Name safety measures that are responsibilities of health assistants.
4. Distinguish between basic and accessory equipment used in a patient unit.
5. Label basic bed positions.
6. Match types of beds found in hospitals to their correct descriptions.
7. Match types of bedmaking to their correct descriptions.
8. Discuss the use of body mechanics in bedmaking.
9. Demonstrate the ability to:
    a. Make an unoccupied bed and an open bed.
    b. Make an occupied bed.
    c. Make a postoperative bed.
    d. Set up a unit.

THE PATIENT'S ENVIRONMENT AND BEDMAKING
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

  A. Provide students with objective sheet.

  B. Provide students with information and job sheets.

  C. Make transparencies.

  D. Discuss unit and specific objectives.

  E. Discuss information sheet.

  F. Demonstrate and discuss procedures outlined on job sheets.

  G. Observe students in return demonstrations.

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

  C. Transparency master: TM 1--Special Types of Beds

  D. Job sheets

    1. Job Sheet #1--Make An Unoccupied Bed And An Open Bed

    2. Job Sheet #2--Make An Occupied Bed

    3. Job Sheet #3--Make A Postoperative Bed

    4. Job Sheet #4--Set Up A Unit

  E. Test

  F. Answers to test

III. Unit references:

  A. Culver, Vivian M. *Modern Bedside Nursing.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1969.

  B. Leake, Mary J. *A Manual of Simple Nursing Procedures.* Philadelphia, Pennsylvania: W.B. Saunders Company, 1971.

  C. Thompson, Ella M. and Rosdahl, Caroline B. *Textbook of Basic Nursing.* Philadelphia, Pennsylvania: J.B. Lippincott, 1973.

D. Smith, Genevieve E. *A Teaching Plan for the Practical Nursing Curriculum.* New Brunswick, New Jersey: Rutgers University Curriculum Laboratory, 1973.

E. Wood, Lucile A. *Nursing Skills for the Allied Health Services.* Philadelphia, Pennsylvania: W.B. Saunders Company, 1972.

F. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

G. Rogers, Helen, *Nursing III: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1976.

IV. Filmstrips:

A. "Safety in Housekeeping." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

B. "Patient Safety: From Thermometers to Wheelchairs." Trainex Corporation.

C. "How's Your Safety Profile." Trainex Corporation.

D. "Do the Sick No Harm." Trainex Corporation.

E. "They Called It Fireproof." National Film Board of Canada, 1251 Avenue of the Americas, New York, NY 10020.

F. "Bedmaking: Occupied." Trainex Corporation.

G. "Lifting and Moving Patient." Trainex Corporation.

THE PATIENT'S ENVIRONMENT AND BEDMAKING
UNIT III

INFORMATION SHEET

I. Terms and definitions

A. Environment--Surroundings, conditions, or influences which affect an individual

B. Humidity--Degree of moisture in the air

C. Siderails or bedrails--Metal side attachments for hospital beds to protect and/or assist patients

D. Patient's unit--Includes bed, bedside table, and other furnishings and equipment set aside for use by one patient

E. Hazardous--Description of anything which may cause injury or danger

F. Emesis basin--Kidney-shaped metal or plastic utensil

G. Bed cradle--Frame to keep bedclothes from touching all or part of the patient's body

H. Bedpan--Shallow vessel used for defecation or urination by patients confined to bed

I. Urinal--Receptacle for urination

J. Drawsheet--Small sheet made of rubber, plastic, or heavy cotton

K. Footdrop--Plantar flexion or turning down of the foot at the ankle due to weakness, injury, disease, or inactivity

L. Footboard--Appliance placed at patient's feet to prevent a deformity called footdrop

M. Bedboard--Appliance placed under mattress to provide firmer support

N. Traction equipment--Devices attatched to bed to exert pull on a part of the body

O. Emergency headboard--Detachable board for use under patient when emergency cardiopulmonary resuscitation is needed

P. Sandbags--Sand-filled bags of various sizes used to keep patient in a specified position

Q. Flex--To bend

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INFORMATION SHEET

II. Environmental factors that affect the patient's well-being

  A. Temperature

  B. Humidity

  C. Ventilation

  (NOTE: These first three environmental needs may be provided by indoor climate control.)

  D. Lighting

  E. Odor

  F. Noise

  G. Privacy

  H. Safety

III. Safety measures that are responsibilities of health assistants

  A. Signal cord, call light, or other communication device must always be within patient's reach

  B. Appliances, and other electrical or mechanical devices, must be used safely and as directed

  Examples: Siderails, oxygen equipment, steam-producing devices

  C. All equipment used should be in good condition

  (NOTE: Report needed repairs according to institutional policies.)

  D. Floor must be kept clear of hazardous materials, such as spilled liquids, papers, and broken glass

  E. Bedside table should be within patient's reach

  F. Hazardous objects, such as safety pins, medicines, and instruments, must be kept out of reach of persons not responsible for their actions

  G. Proper temperatures for enema solutions, bath water, wet dressings, feeding formulas, and other liquids must be observed

  H. Equipment not being used should be returned to storage

  I. Equipment must be used for purpose intended

  J. Adequate lighting for patient and health care activities must be provided

INFORMATION SHEET

K. Footstools and chairs should be easily accessible to patient

L. Learn plan of action to be used in case of fire or disaster

IV. Basic and accessory equipment used in a patient unit

A. Basic equipment

1. Bed
2. Bedside table
3. Overbed or tray table
4. Chair
5. Footstool
6. Waste receptacle
7. Light
8. Signal cord or call bell
9. Screen or curtain

B. Accessory equipment

(NOTE: Use of some of these pieces of equipment will alter the bed-making procedure.)

1. Cradle
2. Footboard or footrest
3. Bedboard
4. Emergency headboard
5. Traction equipment
6. Sandbags
7. Rubber air rings or sponge rubber rings
8. Pillows

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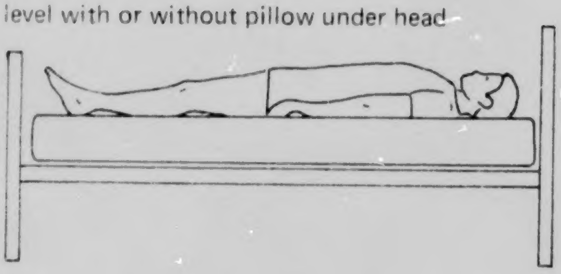
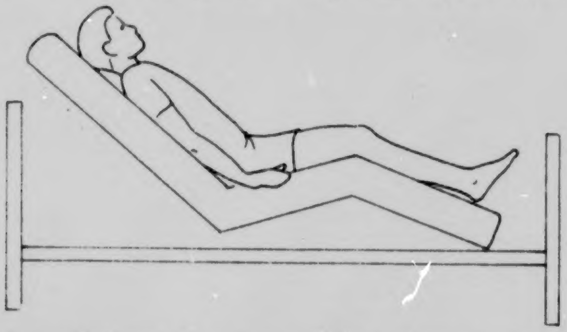
INFORMATION SHEET

V. Basic bed positions

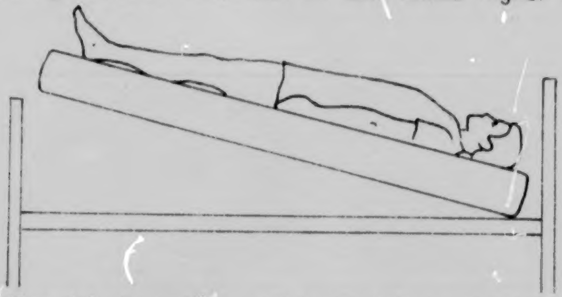
A. Flat--Bed level with or without pillow under head



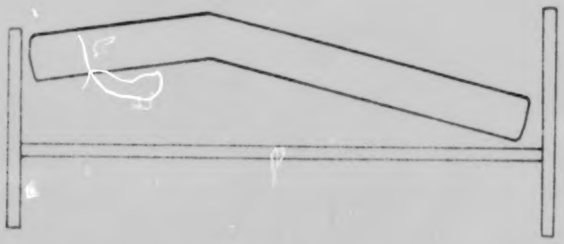
B. Fowler's--Backrest to desired height; knee rest elevated unless contraindicated; position may be low, medium, or high Fowler's as ordered by physician



C. Trendelenberg--Mattress flat; foot of bed raised higher than head of bed



D. Modified Trendelenberg--Hips and knees higher than head with legs below knee on an inclined plane slanting downward



INFORMATION SHEET

VI. Types of beds found in hospitals

A. Incubator--Closed crib with controlled environment; used for newborn infants

B. Bassinet--Small crib usually with closed sides; used for newborn and small infants

C. Crib--Small bed with adjustable sides; used for infants and young children

D. Gatch or hospital bed--Bed fitted with jointed springs which can be adjusted to various positions; used for older children and adults

E. High-Low bed--Electrically or manually operated bed that can be raised or lowered to desired height

F. Circle bed--Bed with a circular frame allowing patient to be turned to any angle from lying flat to standing; used for paralyzed patients or patients who have been in bed for an extended length of time (Transparency 1)

G. Stryker or Foster frame--Apparatus constructed of metal frame and canvas to facilitate turning patient while maintaining a stable position; used for patients with spinal cord injuries or paralysis (Transparency 1)

VII. Types of bedmaking

A. Closed or unoccupied--Unassigned to patient

B. Open--Top bedding turned back ready to receive patient

C. Occupied--With patient in bed

(NOTE: Modifications of bedmaking may be required when special equipment is used.)

D. Postoperative--Variation of an open bed to receive patient following surgery

(NOTE: It may also be called a surgical, recovery, or anesthetic bed.)

VIII. Body mechanics in bedmaking

A. Lifting requires energy to overcome gravity; therefore, folding or unfolding linens on the bed conserves energy

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INFORMATION SHEET

B. Muscles work in groups

  1. Avoid excessive or unnecessary twisting which may cause muscle strain

  2. Face in the direction of the work, moving along with the work to prevent twisting or over-reaching

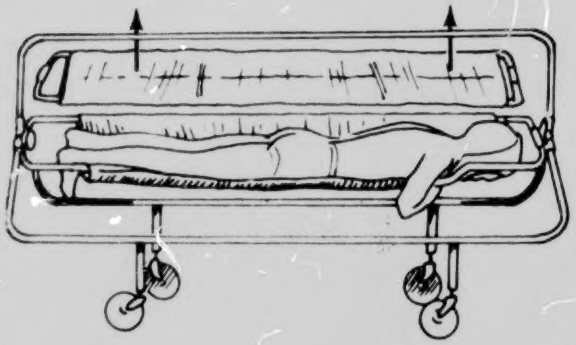
C. Use longest and strongest muscles as much as possible

  1. Separate feet slightly and flex knees when tucking linens under the mattress to reduce back strain

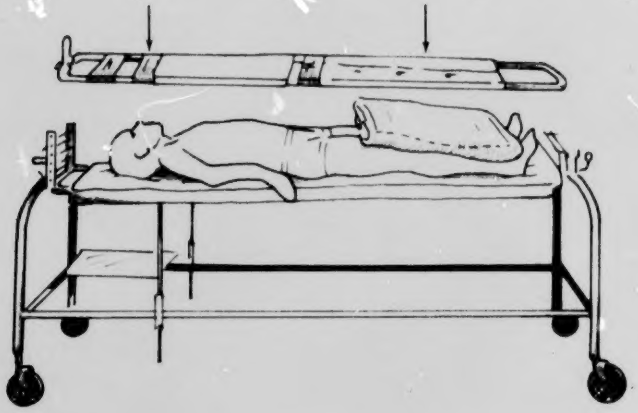
  2. Use shoulder as well as arm muscles when pulling sheets tight

  3. Use rocking motion to aid in pulling with one foot slightly ahead of the other, as in a boxer's stance

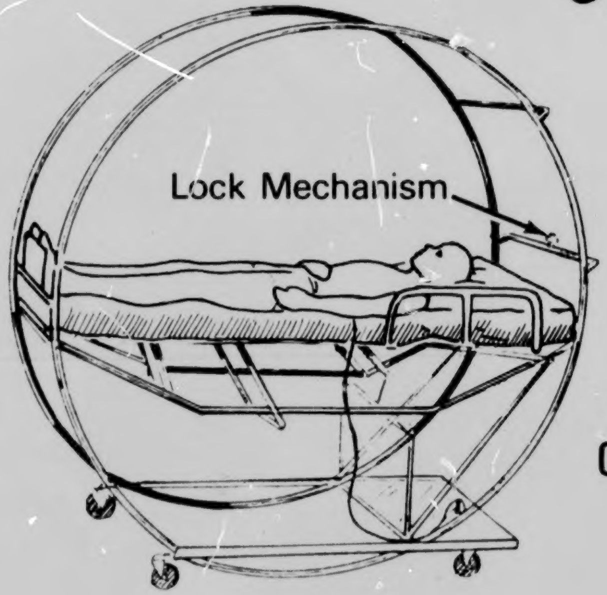
Special Types of Beds



Stryker Frame



Foster Frame



Circoelectric Bed

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THE PATIENT'S ENVIRONMENT AND BEDMAKING
UNIT III

JOB SHEET #1--MAKE AN UNOCCUPIED BED AND AN OPEN BED

I. Equipment

A. Bed pad or mattress cover

B. Two large sheets

(NOTE: Fitted bottom sheets are used in some institutions.)

C. Waterproof drawsheet

D. Cotton drawsheet

E. Blanket, if needed

F. Pillowcases

G. Bedspread

II. Procedure for unoccupied or closed bed

A. Adjust bed to convenient level with bed flat

B. Put mattress pad on mattress

C. Place bottom sheet on bed

1. With raw edge to mattress and smooth side to patient
2. With hem even with foot of mattress
3. With middle of sheet near center of bed
4. With enough to tuck under head of mattress so sheet will remain tucked in place

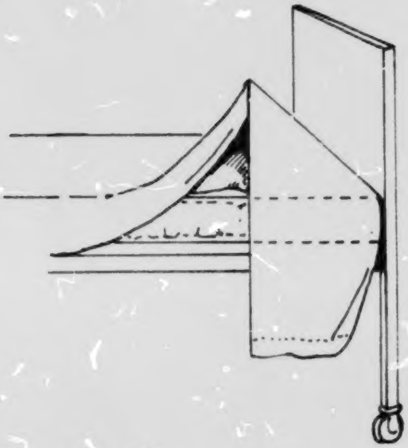
D. Tuck sheet smoothly under head of mattress

JOB SHEET #1

E. Make a mitered corner at head of mattress

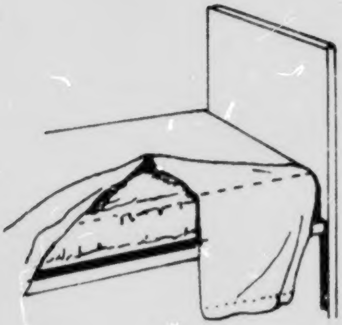
1. Pick up edge of sheet so that it forms a triangle with the side edge of the sheet held perpendicular to the mattress (Figure 1)

FIGURE 1



2. Lay folded corner on mattress (Figure 2)

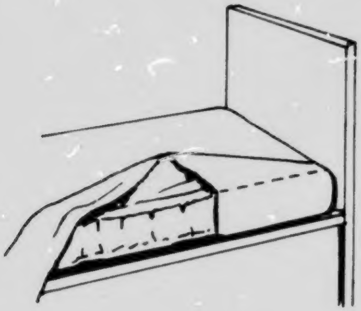
FIGURE 2



JOB SHEET #1

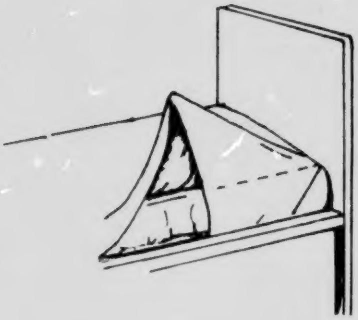
3. Tuck hanging part under mattress (Figure 3)

FIGURE 3



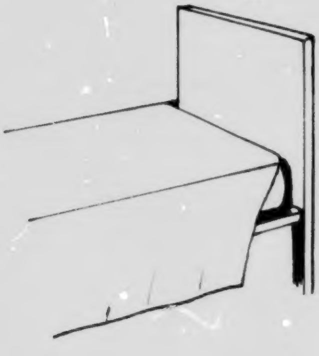
4. Hold sheet in place against mattress; with other hand, pick up corner of folded part from top of mattress (Figure 4)

FIGURE 4



5. Drop corner of sheet over side of mattress (Figure 5)

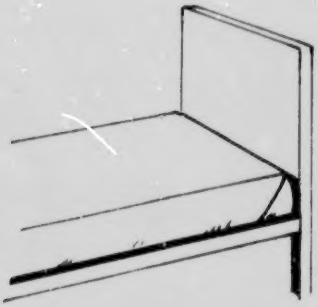
FIGURE 5



JOB SHEET #1

6. Tuck sheet under mattress along the side from head to foot (Figure 6)

FIGURE 6



F. Place center of rubber sheet at center of bed with upper edge about sixteen inches from head of mattress

G. Place cotton drawsheet over rubber sheet with cotton sheet extending over each side of rubber sheet

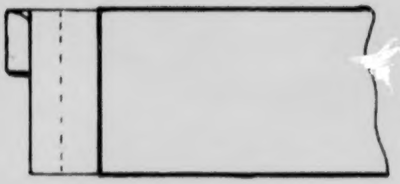
H. Tuck both drawsheets under mattress

I. Place and unfold top sheet, wrong side up and hem even with top edge of mattress (Figure 7)

FIGURE 7

J. Place blanket on top of sheet with upper edge six inches from top edge of mattress (Figure 8)

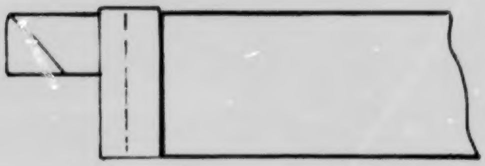
FIGURE 8



JOB SHEET #1

K. Fold top of sheet down over top of blanket (Figure 9)

FIGURE 9



L. Place spread on bed even with top edge of mattress

M. Tuck top sheet, blanket, and spread under mattress at foot of bed; miter corner, allowing sides to hang down

N. Move to the other side of bed to complete bedmaking

O. Fold linen to center of bed

P. Tuck bottom sheet smoothly under head of mattress, mitering top corner; tuck tightly under mattress along the side

Q. Grasp edge of rubber sheet, pulling it tight and tuck under mattress

R. Tuck cotton drawsheet under mattress in same manner

S. Straighten top sheet, blanket, and spread; move to foot of bed to tuck in top sheet, blanket, and spread

T. Miter corners together, letting sides hang free

U. Put case on pillow

V. Place pillow at head of bed with open end away from door

III. Procedure for open bed

A. Proceed as for closed bed, steps A through V

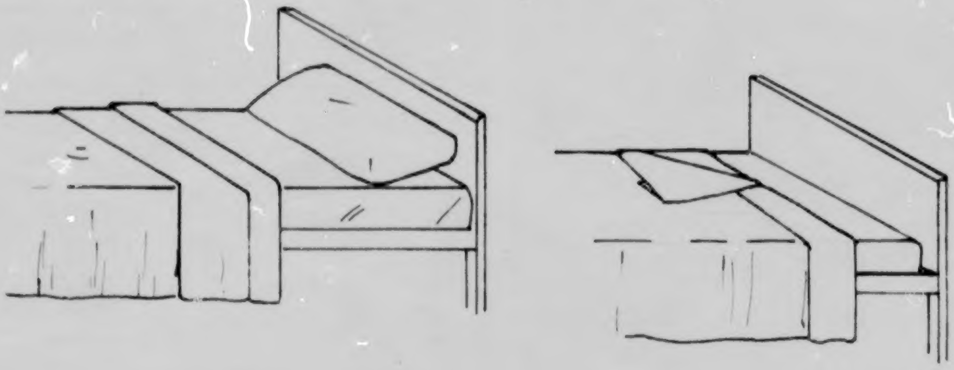
B. Fold top of bedspread over top edge of blanket

C. Fold top edge of sheet down over top edge of blanket and folded spread

JOB SHEET #1

D. Fanfold or piefold top covers toward the foot of the bed (Figure 10)

FIGURE 10



E. Place pillow at head of bed with open edge away from door

THE PATIENT'S ENVIRONMENT AND BEDMAKING
UNIT III

JOB SHEET #2--MAKE AN OCCUPIED BED

I. Equipment needed

   A. Sheet

   B. Drawsheet

   C. Spread

   D. Pillowcase

   E. Bath blanket

   F. Receptacle for soiled linen

II. Procedure

   A. Wash hands

   B. Select linen and take it to patient's unit; arrange in order of use and place on a chair

   C. Inform patient of procedure and provide privacy; adjust siderails if necessary

   (NOTE: Use good body mechanics throughout procedure; adjust height of bed to convenient working height.)

   D. Loosen top covers at foot of bed

   E. Place bath blanket and top covers over patient

   F. Have patient hold bath blanket or tuck it under his/her shoulders to keep in place

   G. Reach under bath blanket and fanfold top covers to foot of bed

   (CAUTION: Handle soiled linen with care to protect self, patient, and other patients.)

   H. Remove spread

   (NOTE: If spread is to be used again, fold it with the hems together, then fold in half, edges together, and in half again. Hang over back of chair. If spread is not to be used, place it in linen receptacle.)

   I. Remove blanket and fold in same manner as spread

   J. Remove top sheet and fold for reuse in same manner as spread was folded

JOB SHEET #2

K. Move mattress to head of bed

(NOTE: Ask patient to grasp the head of the bed, if able, to assist in moving mattress. If patient is unable to assist, request assistance from a co-worker.)

L. Assist patient to turn to opposite side of bed, away from side to be made first; adjust siderails if necessary

M. Loosen linens on side to be made, folding or rolling each piece separately and as close to patient as possible

N. Straighten mattress pad

O. Put bottom sheet on mattress, raw edge to mattress, with center fold near center of bed; tuck under mattress making mitered corner at top

P. Fanfold other half of sheet and tuck it as close to patient as possible

Q. Unfold rubber sheet, straighten, and pull tight; tuck under mattress

R. Unfold drawsheet, leaving it folded in half from top to bottom; place center fold near center of bed; tuck one side under mattress

S. Fanfold other half of drawsheet close to patient

T. Move patient to clean side of bed; adjust bath blanket to keep patient covered; adjust siderails if necessary

U. Move to other side of bed; remove soiled linen

V. Tuck in clean linen snugly and in proper sequence

W. Move patient to center of bed

X. Unfold top sheet over bath blanket

Y. Remove bath blanket, fold, and put away

Z. Place blanket and spread over patient

AA. Tuck linens in at foot of bed, making mitered corners as in unoccupied bed

BB. Loosen bed covers over patient's feet by grasping covers over toes and pulling them up gently

CC. Adjust siderails if necessary

DD. Position patient's communication device within reach

EE. Remove soiled linen

THE PATIENT'S ENVIRONMENT AND BEDMAKING
UNIT III

JOB SHEET #3--MAKE A POSTOPERATIVE BED

I. Equipment needed

   A. Clean linen as for an unoccupied bed

   B. Waterproof and cotton drawsheets or other bed protector

   C. Waterproof pillowcase

   D. Bath blanket

   E. For bedside table

      1. Two emesis basins
      2. Tongue depressors
      3. Mouth wipes
      4. Writing pad and pencil
      5. Receptacle for soiled wipes
      6. Stethoscope
      7. Sphygmomanometer
      8. IV standard

II. Procedure

   A. Strip bed and turn mattress if indicated

   B. Put on bottom sheet, waterproof drawsheet, and cotton drawsheet in usual manner

   C. Place second waterproof drawsheet and cotton drawsheet or other bed protector across upper part of mattress so it overlaps first drawsheet if indicated

   D. Place top sheet, blanket, and spread on bed in the usual way, except do not tuck them in at the foot

   E. Make cuff of top bedding in the usual way

   F. Fold back top bedding at the foot even with the mattress

   G. Fold back top of bedding even with mattress on side of bed where stretcher can be placed most conviently and fanfold to opposite side of bed

JOB SHEET #3

H. Place plastic pillowcase and cotton pillowcase on pillow

I. Stand pillow on its side at head of bed

J. Take everything, including water glass and pitcher, off the bedside table

K. Arrange emesis basin, tongue depressors, mouth wipes, paper, and pencil conveniently

L. Place waste receptacle and IV standard near bedside

M. Clear pathway for stretcher

(NOTE: Each insititution will have its own procedure for making a post-operative bed.)

THE PATIENT'S ENVIRONMENT AND BEDMAKING
UNIT III

JOB SHEET #4-SET UP A UNIT

I. Equipment

- A. Closed bed
- B. Overbed table
- C. Chair
- D. Footstool
- E. Communication device
- F. Other equipment as provided or required
- G. Bedside table containing
    1. Gown
    2. Bath blanket
    3. Bath towel
    4. Hand towel
    5. Washcloth
    6. Washbasin
    7. Soap in soap dish
    8. Emesis basin
    9. Bedpan
    10. Urinal
- H. Pitcher and glass
- I. Tissues

II. Procedure

- A. Make unoccupied bed if not already made

  (NOTE: If bed is not to be occupied for some time, make a closed bed by bringing top linens up to pillow and folding a cuff of sheet and bedspread down.)

- B. Make open bed, if patient is waiting to be admitted

JOB SHEET #4

C. Check bedside table to see that equipment is complete

D. Arrange unit attractively

E. Provide fresh drinking water and ice as permitted when patient is to be admitted

THE PATIENT'S ENVIRONMENT AND BEDMAKING
UNIT III

TEST

NAME ______________________________ SCORE ________________

1. Match terms on the right associated with patient's environment and bedmaking to their correct definitions on the left. Place the correct numbers in the appropriate blanks.

______a. Appliance placed under mattress to provide firmer support

______b. Kidney-shaped metal or plastic utensil

______c. Degree of moisture in the air

______d. Detachable board for use under patient when emergency cardiopulmonary resuscitation is needed

______e. To bend

______f. Receptacle for urination

______g. Description of anything which may cause injury or danger

______h. Plantar flexion or turning down of the foot at the ankle due to weakness, injury, disease, or inactivity

______i. Small sheet made of rubber, plastic, or heavy cotton

______j. Appliance placed at patient's feet to prevent a deformity called footdrop

______k. Shallow vessel used for defecation or urination by patients confined to bed

______l. Surroundings, conditions, or influences which affect an individual

______m. Devices attached to bed to exert pull on a part of the body

______n. Sand-filled bags of various sizes used to keep patient in specified position

1. Environment
2. Humidity
3. Siderails or bedrails
4. Patient's unit
5. Hazardous
6. Emesis basin
7. Bed cradle
8. Bedpan
9. Urinal
10. Drawsheet
11. Footdrop
12. Footboard
13. Bedboard
14. Traction equipment
15. Emergency headboard
16. Sandbags
17. Flex

_____o. Metal side attachments for hospital beds to protect and/or assist patients

_____p. Frame to keep bedclothes from touching all or part of the patient's body

_____q. Includes bed, bedside table, and other furnishings and equipment set aside for use by one patient

2. Select from the list below environmental factors that affect the patient's well-being. Place an "X" in the appropriate blanks.

_____a. Footdrop

_____b. Privacy

_____c. Ventilation

_____d. Drugs

_____e. Sex

_____f. Humidity

_____g. Temperature

_____h. Safety

_____i. Odor

_____j. Lighting

_____k. Bed sores

_____l. Noise

3. Name six safety measures that are responsibilities of health assistants.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

4. Distinguish between basic and accessory equipment used in a patient unit by placing a "B" for basic equipment and an "A" for accessory equipment in the blanks provided.

______a. Bed

______b. Pillows

______c. Rubber air rings or sponge rubber rings

______d. Screen or curtain

______e. Sandbags

______f. Light

______g. Signal cord or call bell

______h. Chair

______i. Bedboard

______j. Cradle

______k. Bedside table

______l. Traction equipment

______m. Footstool

______n. Waste receptacle

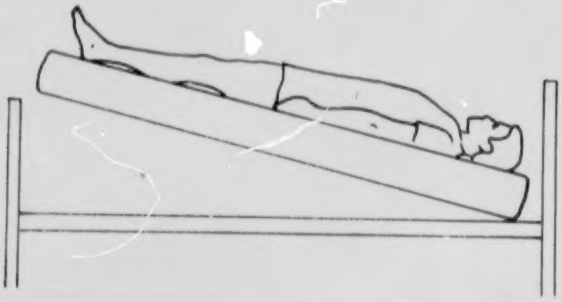
______o. Footboard or footrest

______p. Overbed or tray table

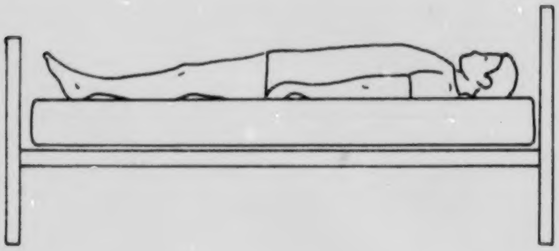
______q. Emergency headboard

5. Label the basic bed positions shown in the illustrations below.

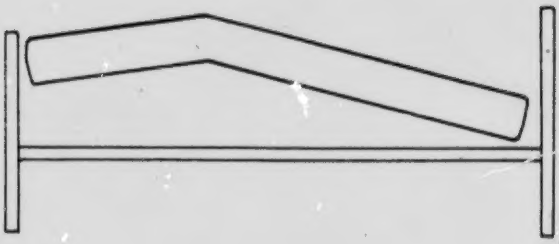
a. ______________________



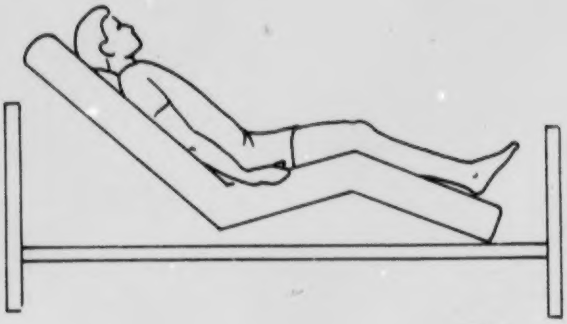
b. ______________________



c. ______________________



d. ______________________



6. Match the types of beds found in hospitals on the right to their correct descriptions. Place the correct numbers in the blanks provided.

______a. Bed fitted with jointed springs which can be adjusted to various positions; used for older children and adults

______b. Apparatus constructed of metal frame and canvas to facilitate turning patient while maintaining a stable position; used for patients with spinal cord injuries or paralysis

______c. Small bed with adjustable sides; used for infants and young children

______d. Closed crib with controlled environment; used for newborn infants

______e. Bed with a circular frame allowing patient to be turned to any angle from lying flat to standing; used for paralyzed patients or patients who have been in bed for an extended length of time

______f. Small bed usually with closed sides; used for newborn and small infants

______g. Electrically or manually operated bed that can be raised or lowered to desired height

1. Incubator
2. Bassinet
3. Crib
4. Gatch or hospital bed
5. Circle bed
6. High-low bed
7. Stryker or Foster frame

7. Match types of bedmaking to their correct descriptions. Place the correct numbers in the blanks provided.

______a. With patient in bed

______b. Variation of an open bed to receive patient following surgery

______c. Top bedding turned back ready to receive patient

______d. Unassigned to patient

1. Closed or unoccupied
2. Open
3. Occupied
4. Postoperative

8. Discuss the use of body mechanics in bedmaking.

____

____

____

____

____

9. Demonstrate the ability to:

   a. Make an unoccupied bed and an open bed.

   b. Make an occupied bed.

   c. Make a postoperative bed.

   d. Set up a unit.

(NOTE: If activities in number 9 have not been completed prior to the test, ask your instructor when they should be accomplished.)

THE PATIENT'S ENVIRONMENT AND BEDMAKING
UNIT III

ANSWERS TO TEST

1. a. 13
   b. 6
   c. 2
   d. 15
   e. 17
   f. 9
   g. 5
   h. 11
   i. 10
   j. 12
   k. 8
   l. 1
   m. 14
   n. 16
   o. 3
   p. 7
   q. 4

2. b, c, f, g, h, i, j, l

3. Any six of the following:

   a. Signal cord, call light, or other communication device must always be within patient's reach

   b. Appliances, and other electrical or mechanical devices, must be used safely and as directed

   c. All equipment used should be in good condition

   d. Floor must be kept clear of hazardous materials, such as spilled liquids, papers, and broken glass

   e. Bedside table should be within patient's reach

   f. Hazardous objects, such as safety pins, medicines, and instruments, must be kept out of reach of persons not responsible for their actions

   g. Proper temperatures for enema solutions, bath water, wet dressings, feeding formulas, and other liquids must be observed

   h. Equipment not being used should be returned to storage

   i. Equipment must be used for purpose intended

   j. Adequate lighting for patient and health care activities must be provided

   k. Footstools and chairs should be easily accessible to patient

   l. Learn plan of action to be used in case of fire or disaster

4. a. B
   b. A
   c. A
   d. B
   e. A
   f. B
   g. B
   h. B
   i. A
   j. A
   k. B
   l. A
   m. B
   n. B
   o. A
   p. B
   q. A

5. a. Trendelenberg
   b. Flat
   c. Modified Trendelenberg
   d. Fowler's

6. a. 4
   b. 7
   c. 3
   d. 1
   e. 5
   f. 2
   g. 6

7. a. 3
   b. 4
   c. 2
   d. 1

8. Discussion should include:

   a. Lifting requires energy to overcome gravity; therefore, folding or unfolding linens on the bed conserves energy

   b. Muscles work in groups

      1. Avoid excessive or unnecessary twisting which may cause muscle strain

      2. Face in the direction of the work, moving along with the work to prevent twisting or over-reaching

- c. Use longest and strongest muscles as much as possible
    1. Separate feet slightly and flex knees when tucking linens under the mattress to reduce back strain
    2. Use shoulder as well as arm muscles when pulling sheets tight
    3. Use rocking motion to aid in pulling with one foot slightly ahead of the other, as in a boxer's stance

9. Performance skills evaluated to satisfaction of instructor

BODY MECHANICS AND POSITIONS
UNIT IV

UNIT OBJECTIVE

After completion of this unit, the student should be able to identify correct body alignment when standing, sitting, or lifting and select ways exercise promotes the functioning of the patient's body. The student also should be able to apply restraints, position the patient, assist the patient to dangle, get into a chair and wheelchair, put a patient on a carrier, and use correct posture. This knowledge will be evidenced by completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with body mechanics to their correct definitions.
2. Select from a list reasons why health assistants should use proper body mechanics.
3. State principles of body mechanics.
4. Identify from given pictures correct body alignment when standing, sitting or lifting.
5. Match terms associated with body positions and activity to their correct definitions.
6. Select from a list ways exercise promotes functioning of the patient's body.
7. Describe development and treatment of contractures.
8. State nursing measures that may prevent or decrease effects of immobility on the body.
9. Identify various body positions from given pictures.
10. List ways of maintaining bed patient's safety.
11. Demonstrate the ability to:
    a. Apply restraints.
    b. Position the patient.
    c. Assist patient to dangle.
    d. Get patient into chair and wheelchair.

e. Assist patient to walk.

f. Put patient on carrier.

g. Use correct posture.

BODY MECHANICS AND POSITIONS
UNIT IV

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information sheets.

   F. Demonstrate and discuss procedures outlined on job sheets.

   G. Invite resource people from a physical therapy department to visit class and speak on good body mechanics or career opportunities in the field.

   H. Visit a physical therapy department as part of HOSA activities.

   I. Write J. T. Posey Company, 39 S. Altadena Drive, Pasadena, CA 91107 for films, pamphlets and various types of restraints to practice with.

   J. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Posture: Standing

      2. TM 2--Posture: Sitting

      3. TM 3--Lifting Correctly and Incorrectly

      4. TM 4--Directions

      5. TM 5--Directions (Continued)

      6. TM 6--Contractures Due to Faulty Bed Position

      7. TM 7--Patient Positions

8. TM 8--Patient Positions (Continued)

9. TM 9--Patient Positions (Continued)

D. Job sheets

1. Job Sheet #1--Apply Restraints

2. Job Sheet #2--Position The Patient

3. Job Sheet #3--Assist Patient To Dangle

4. Job Sheet #4--Get Patient Into Chair And Wheelchair

5. Job Sheet #5--Assist Patient To Walk

6. Job Sheet #6--Put Patient On A Carrier

7. Job Sheet #7--Use Correct Posture

E. Test

F. Answers to test

III. Unit reference--Rogers, Helen. *Nursing I: A Course of Study.* Stillwater:Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

IV. Filmstrips:

A. "The Use of Protective Restraints." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

B. "Positioning to Prevent Contractures." Trainex Corporation.

C. "Lifting and Moving Patient." Trainex Corporation.

D. "Transfer Activities and Ambulation." Trainex Coporation.

V. Additional reference--Posey Company, "Posey Guide." USA J.T. Posey Co., 39 S. Altadena Drive, Pasadena, CA 91107.

705

BODY MECHANICS AND POSITIONS
UNIT IV

INFORMATION SHEET

I. Terms and definitions

   A. Body mechanics--Coordination of body alignment, balance, and movernent

   B. Strain--Bodily injury from excessive tenison, effort, or use

   C. Fatigue--State of increased discomfort and decreased efficiency resulting from prolonged exertion

   D. Posture--Alignment and position of the body

   E. Alignment--Relationship of body segments to each other

   F. Flaccid--Lacking muscle tone

II. Reasons why health assistants should use proper body mechanics

   A. Saves energy by making work easier

   B. Prevents muscle strain

   C. Increases efficiency

   D. Promotes good posture

   E. Improves health and appearance

   F. Sets example for others, particularly patients

   G. Preserves muscle tone and strength

III. Principles of body mechanics

   A. Broaden base of support by standing with feet slightly apart to give more balance and stability

   B. Maintain good alignment of body parts to reduce strain and fatigue

   C. Change position and type of activity to help maintain muscle tone and lessen fatigue

   D. Carry weight close to body to use less effort

   (NOTE: Reaching toward work or carrying heavy objects away from body causes strain.)

   E. Improve circulation in legs and feet and reduce muscle strain by using proper body alignment while sitting

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INFORMATION SHEET

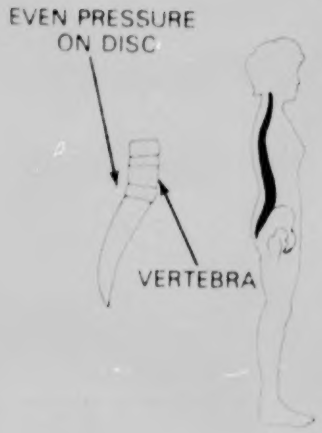
F. Pull, slide, or roll object rather than lift it to use less effort

G. Move heavy objects on a smooth surface rather than on a wrinkled or rough surface

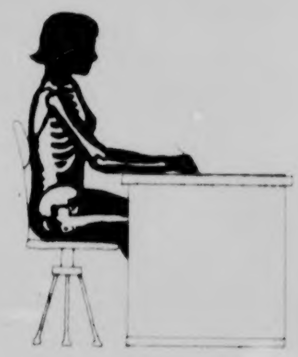
H. Use mechanical devices whenever possible to lift and turn heavy or helpless patients

I. Encourage patients to help themselves as much as possible

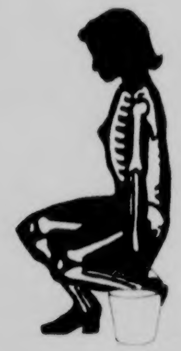
IV. Correct body alignment for standing, sitting, or lifting (Transparencies 1, 2, and 3)



Standing



Sitting



Lifting

V. Terms and definitions associated with body positions and activity

A. Contracture--Abnormal shortening of muscle, tendon, or scar tissue producing deformity or distortion which may become permanent (Transparency 6)

B. Atrophy--Decrease in size due to disuse, disease, injury, or weakness

C. Range-of-motion--Extent to which joint can be extended and flexed

D. Recumbent--Lying down

E. Popliteal space--Pertaining to posterior surface of the knee

F. Orthopnea--Respiratory condition in which breathing is possible only when person sits or stands in an erect position

G. Decubitus ulcer--Lesion of the skin due to local interference with circulation

INFORMATION SHEET

H. Cerebrovascular accident--Sudden interruption of bl[illegible]pply to some vital center in the brain

I. Paralysis--Loss or impairment of ability to move parts of body

J. Laceration--Wound produced by tearing of body tissue

K. Dependent edema--Abnormal accumulation of fluid in tissues affecting lower portions of the body most severely

L. Hypostatic pneumonia--Lung inflammation caused by constantly remaining in the same position

M. Proximal--Nearest to origin of structure (Transparency 5)

N. Distal--Farthest from origin of a structure (Transparency 5)

O. Peripheral--Pertaining to the outward part (Transparency 5)

P. Medial--Near midline (Transparency 4)

Q. Lateral--Toward side (Transparency 4)

R. Posterior--Toward back (Transparency 4)

S. Anterior--Toward front (Transparency 4)

T. Superior--Above (Transparency 4)

U. Inferior--Below (Transparency 4)

VI. Ways exercise promotes functioning of the patient's body

A. Preserves strength, tone, and elasticity of muscles

B. Helps prevent contractures

C. Relieves pressure area which aids in preventing decubitus ulcers

D. Stimulates appetite

E. Aids elimination

F. Promotes strength and hardness of bones

G. Helps maintain blood pressure and efficient circulation

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INFORMATION SHEET

H. Aids in preventing emboli, thrombi, and hypostatic pneumonia

(NOTE: Decrease in activity for any reason results in pooling of secretions. This could result in blood pooling in vessels forming clots or secretions forming in lungs and respiratory tract causing pneumonia.)

I. Reduces fatigue

VII. Contractures (Transparency 6)

A. Development

1. Normal mobility is dependent on free movement of joints and muscles

2. Disuse of joints and muscles results in connective tissue becoming less pliable, a process called fibrosis

a. Poor position in bed can lead to fibrosis

b. Fibrosis can occur within a week's time and can lead to contractures

B. Treatment

1. Prevention of contractures is the best treatment

2. Contractures are very hard to correct once they begin

VIII. Nursing measures that may prevent or decrease effects of immobility on the body

A. Proper alignment of body

(NOTE: Body must be kept in functional position and must have good posture as much as possible. This can be accomplished with pillows, sand bags, and rolled blankets.)

B. Changing position

(NOTE: Position should be changed at least every two hours.)

C. Joint mobility exercises

(NOTE: Active and passive range-of-motion exercises can be done at least twice a day.)

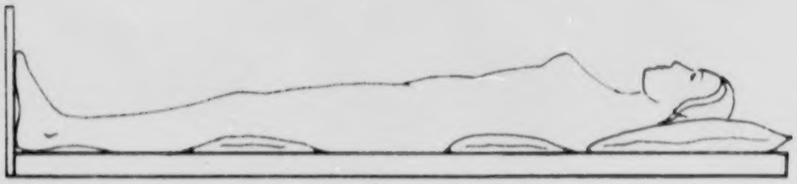
D. Environmental structuring

(NOTE: Keep patient's surroundings interesting; provide opportunities for activity.)

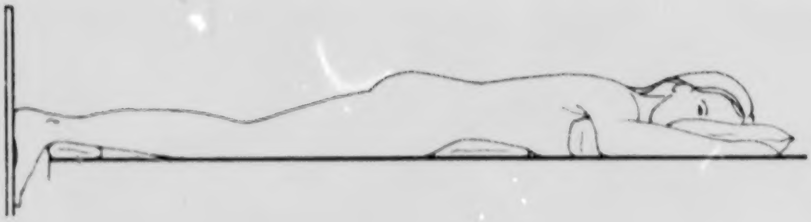
INFORMATION SHEET

IX. Various body positions (Transparencies 7, 8, and 9) (Job Sheet #2)

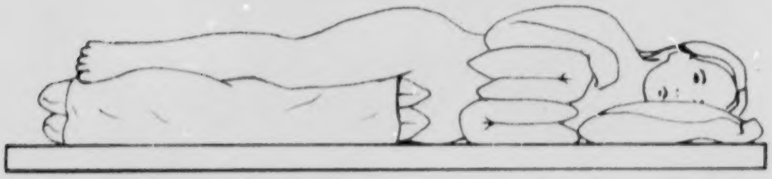
A. Horizontal recumbent or supine



B. Prone



C. Lateral



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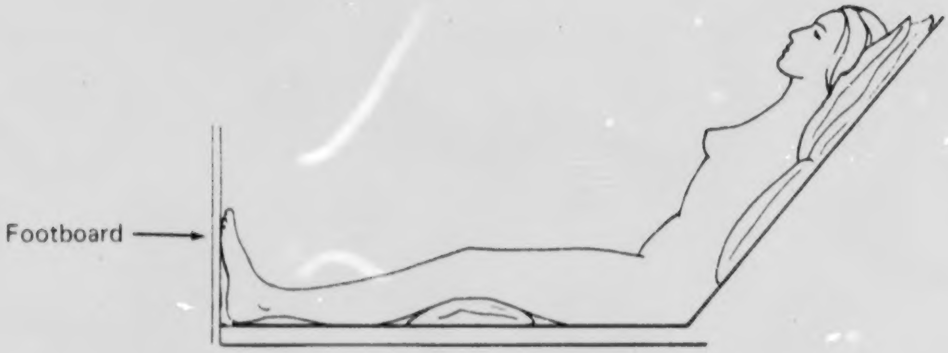
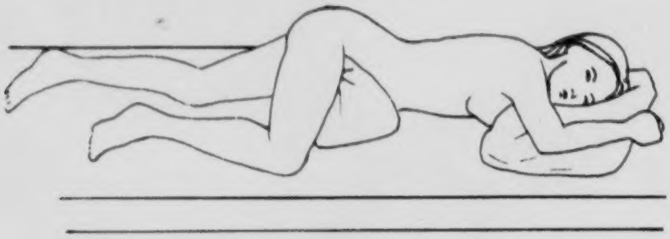
INFORMATION SHEET

D. Fowler's

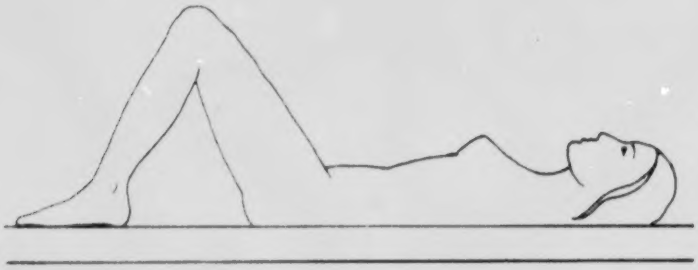


(NOTE: Hips should bend where the mattress bends.)

E. Sim's or semi-prone

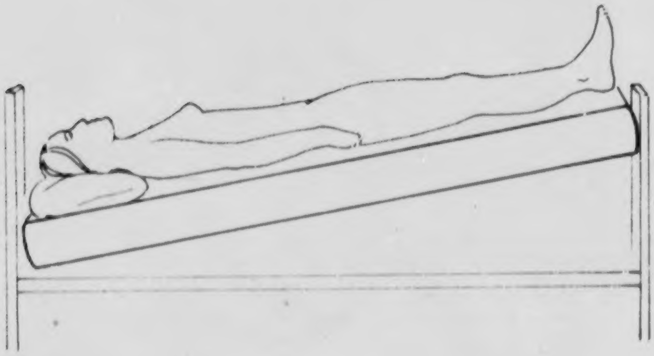


F. Dorsal recumbent

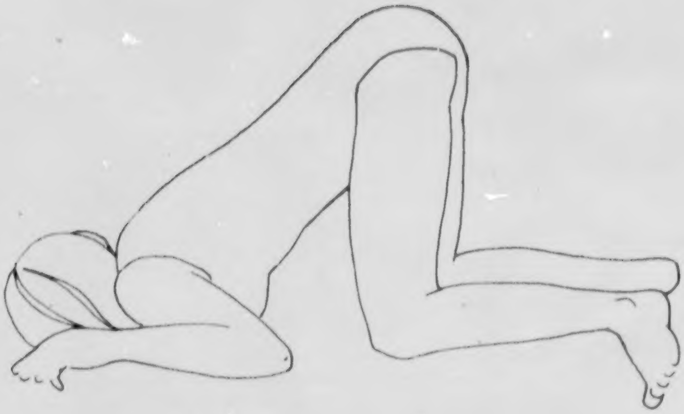


INFORMATION SHEET

G. Trendelenburg



H. Knee chest



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INFORMATION SHEET

E. Keep equipment and belongings that patient needs within reach

F. Check frequently patients receiving hot or cold applications

G. Keep bed linen clean, dry, and wrinklefree to minimize pressure areas

H. Keep beds locked to prevent rolling

I. Fold gatch handles back to bed to prevent injury to patient and health personnel

J. Use electrical equipment safely; observe patient closely when using any electrical appliances

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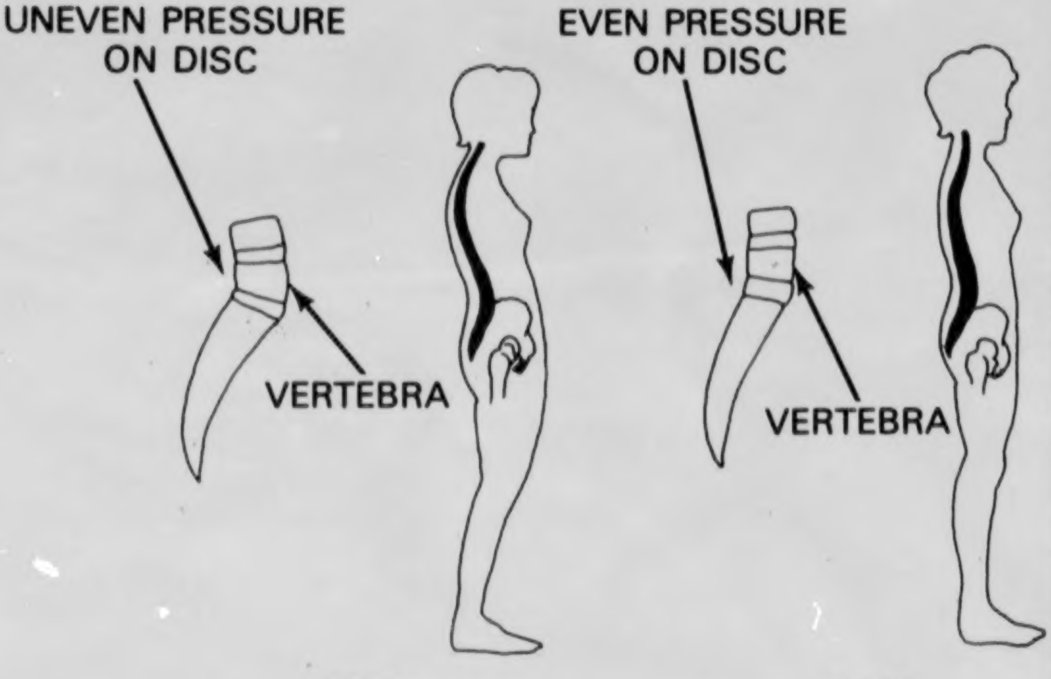
Posture: Standing



POOR

GOOD

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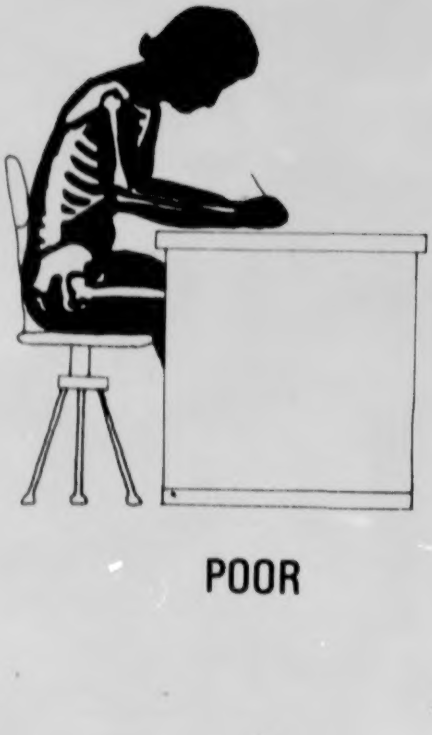
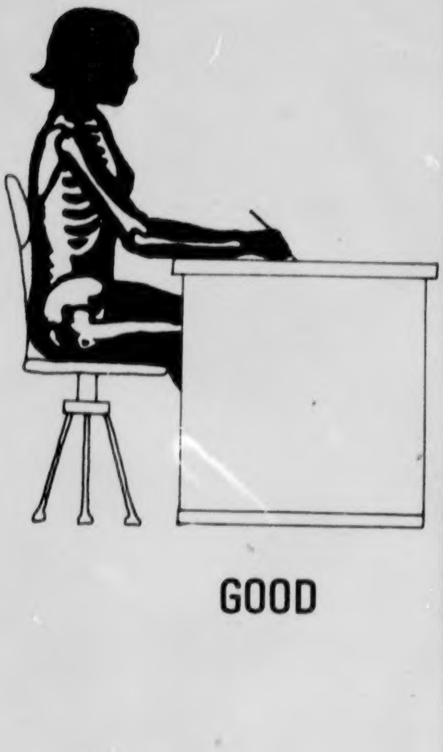
TM 2

Posture: Sitting

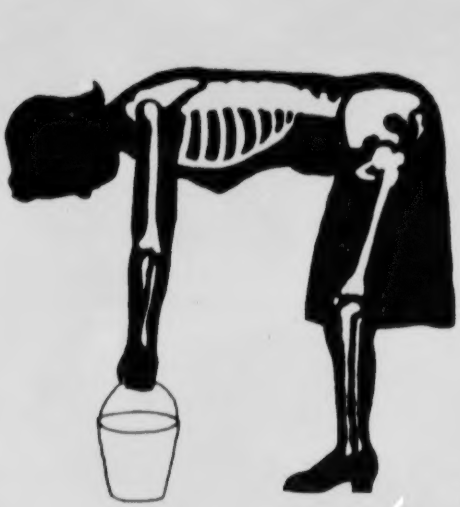


POOR



GOOD

Lifting Correctly and Incorrectly



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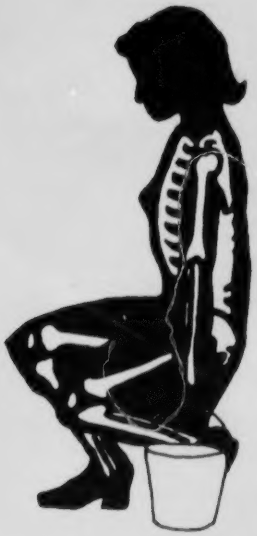

GOOD

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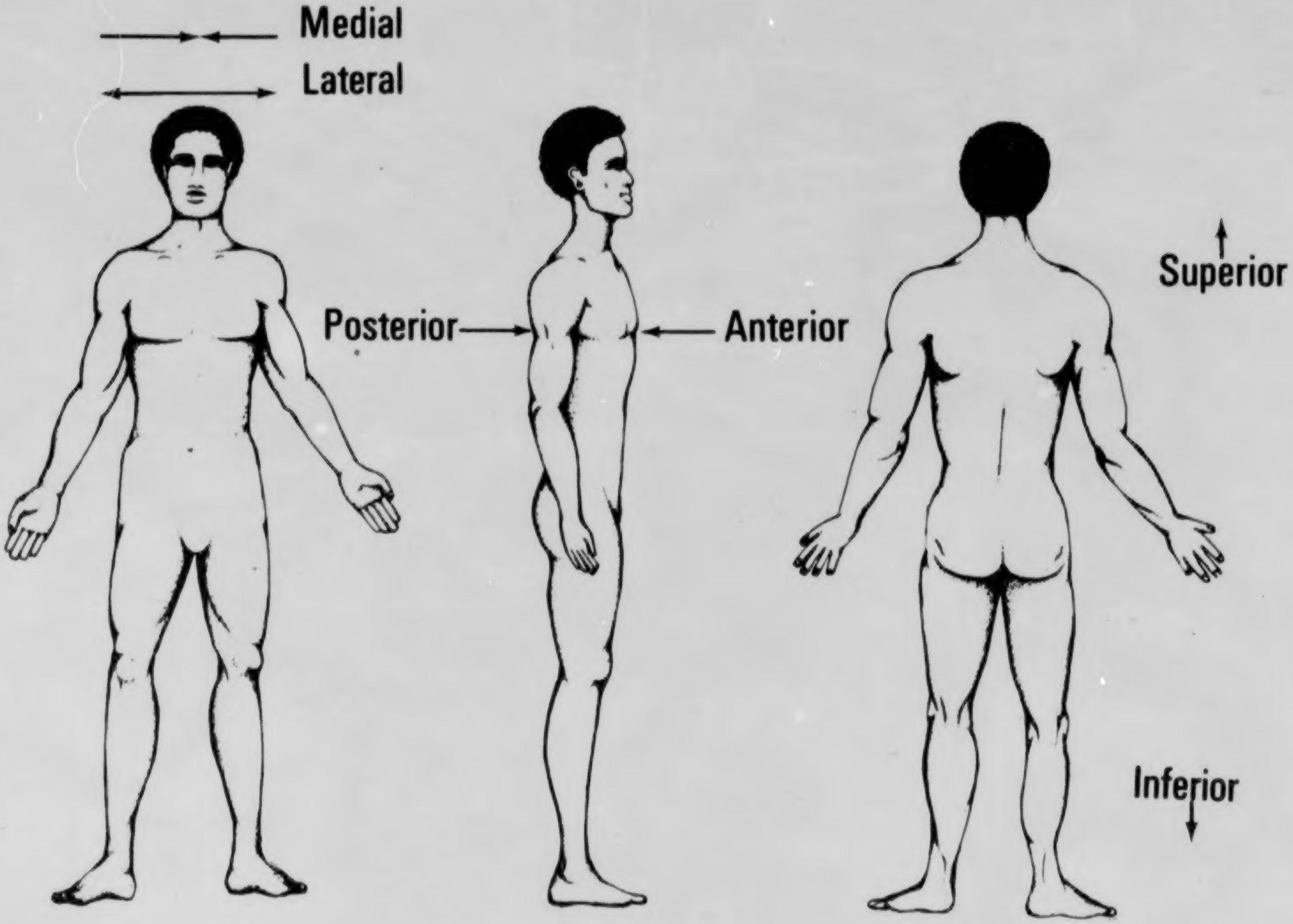
TM 3

Directions



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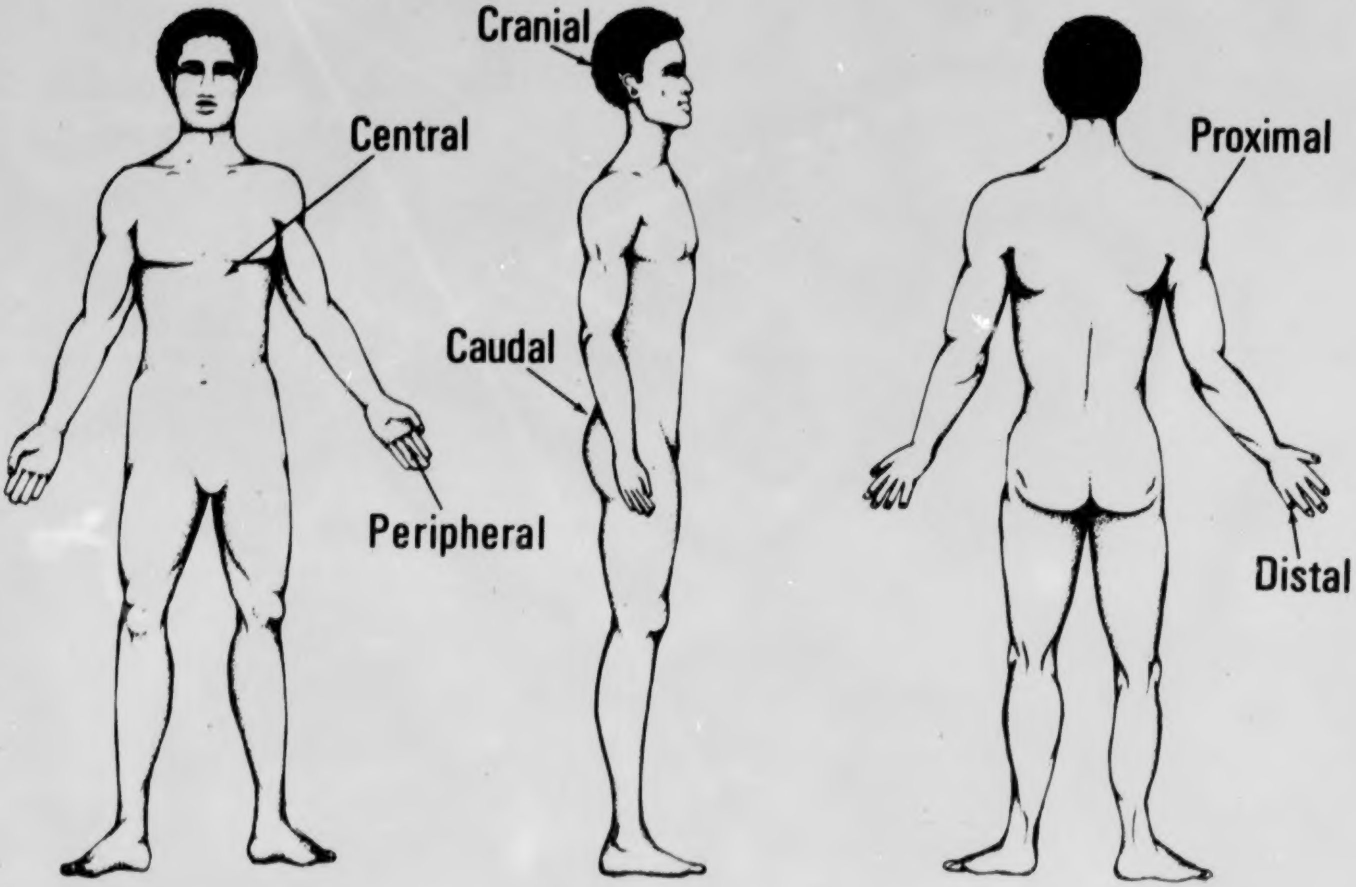
Directions
(Continued)



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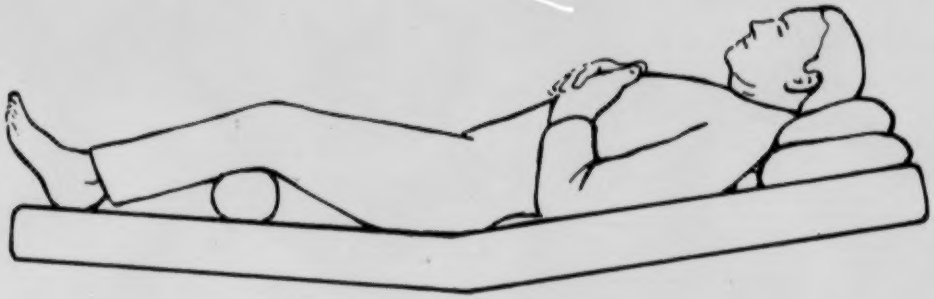
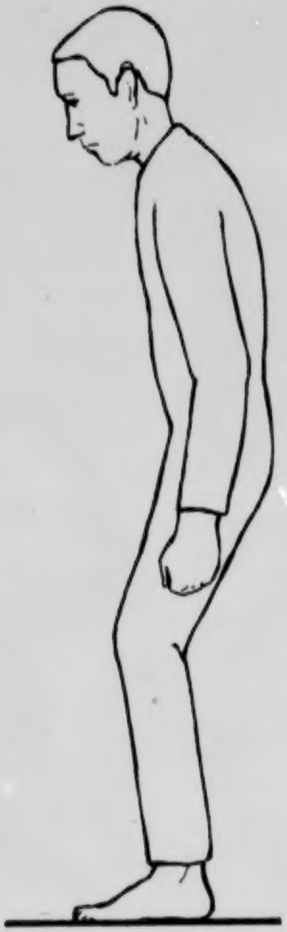
TM 5

HSC - 151-D

Contractures Due to Faulty Bed Position

Poor Posture During Prolonged Bedrest May Lead to Deformed Posture.





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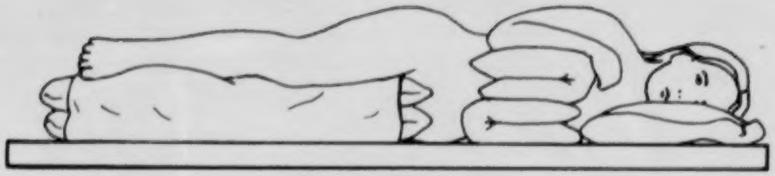
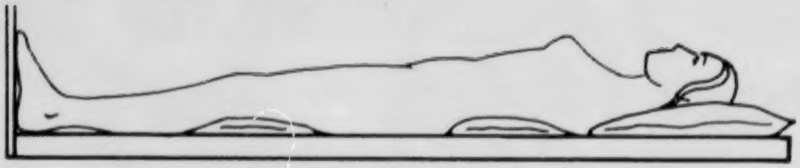
TM 6

Patient Positions

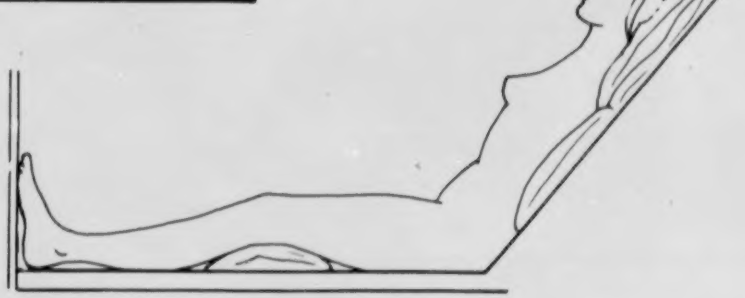


Lateral Position

Supine Position

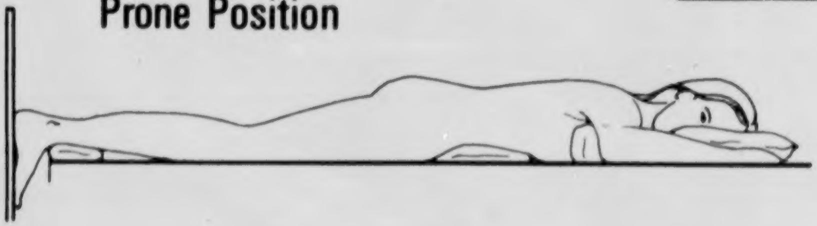


Fowler's Position



NOTE: Bend of hips
at bend of mattress.

Prone Position



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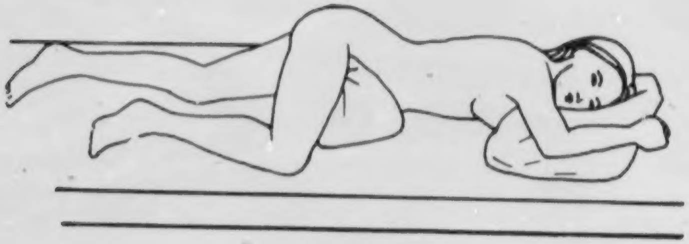
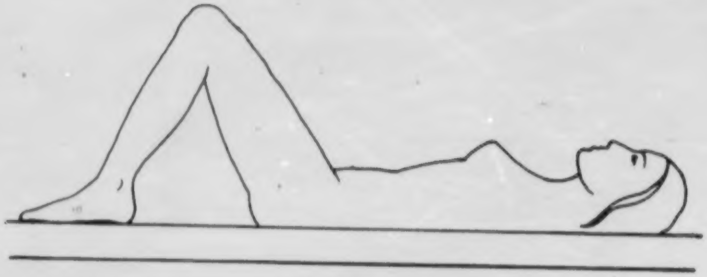
Patient Positions

(Continued)

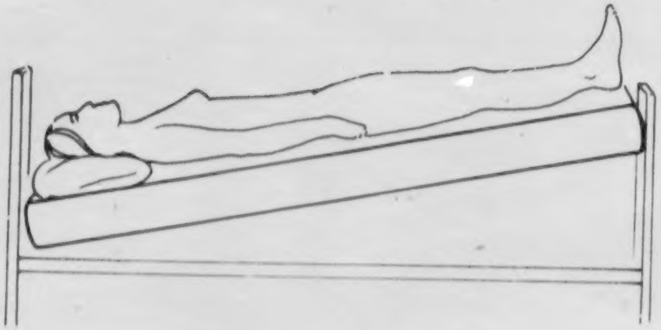
Sim's Position





Dorsal Recumbent Position

Trendelenburg Position



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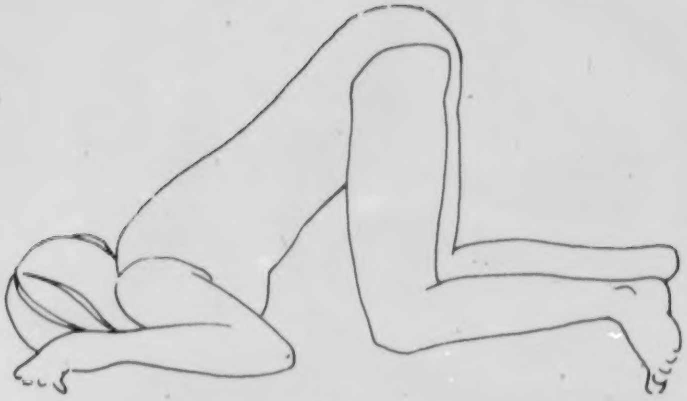
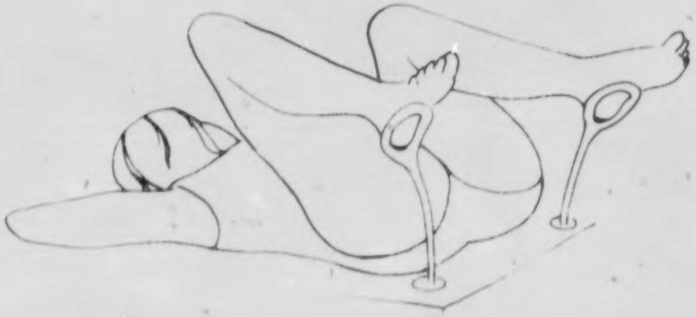
Patient Positions

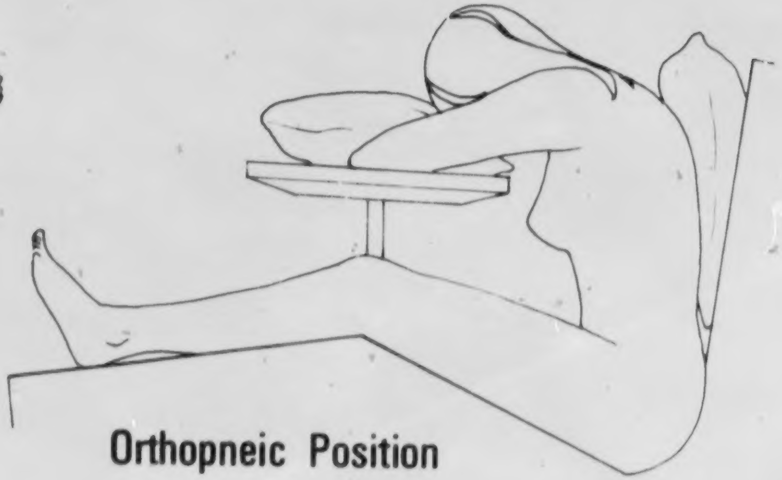
(Continued)



Knee-Chest Position



Lithotomy Position



Orthopneic Position

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BODY MECHANICS AND POSITIONS
UNIT IV

JOB SHEET #1--APPLY RESTRAINTS

(NOTE: Hopefully restraints are used as a last resort in confining patient in bed or in chair. Restraints are applied when patients need extra security or support to keep from falling or moving from bed or chair when incapable of moving on their own. Some patients are confused and will pull at tubes and dressings. Restraints will keep them from injurying themselves.)

I. Equipment

   A. Belts

   B. Wrist restraints

   C. Mittens

   D. Vest restraints

II. Procedure

   A. Belts (Figure 1)

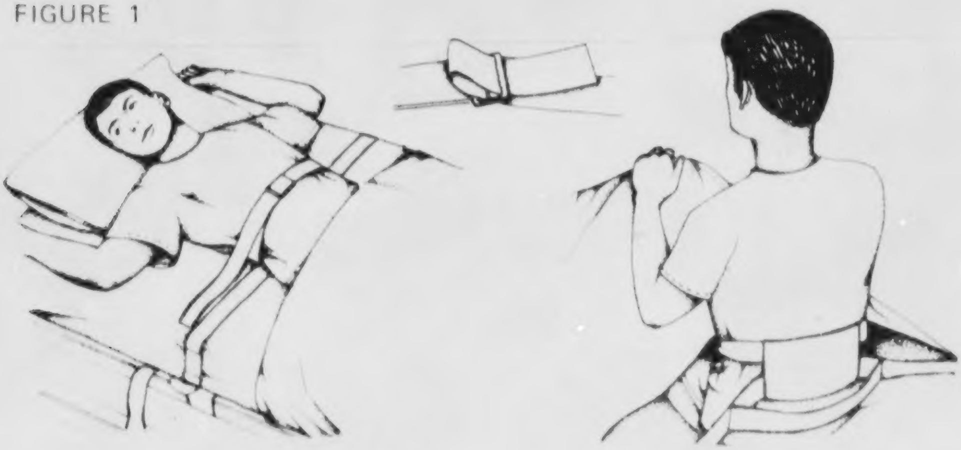
      1. Place flannel back pad in center of bed approximately where patient's waist will be

      2. Anchor long bed straps to bed spring frame on both sides by encircling bed spring frame and passing through buckle

      3. Check to see that pad is in center of bed and that belts are secured with buckles up and waist belt toward head of bed

      4. Place patient on belt and secure waist belt

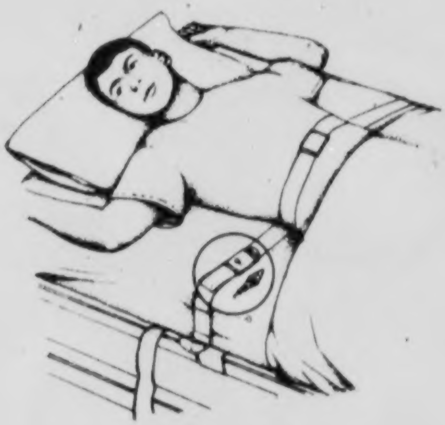
FIGURE 1



JOB SHEET #1

5. Use belt with lock if more security is needed (Figure 2)

FIGURE 2

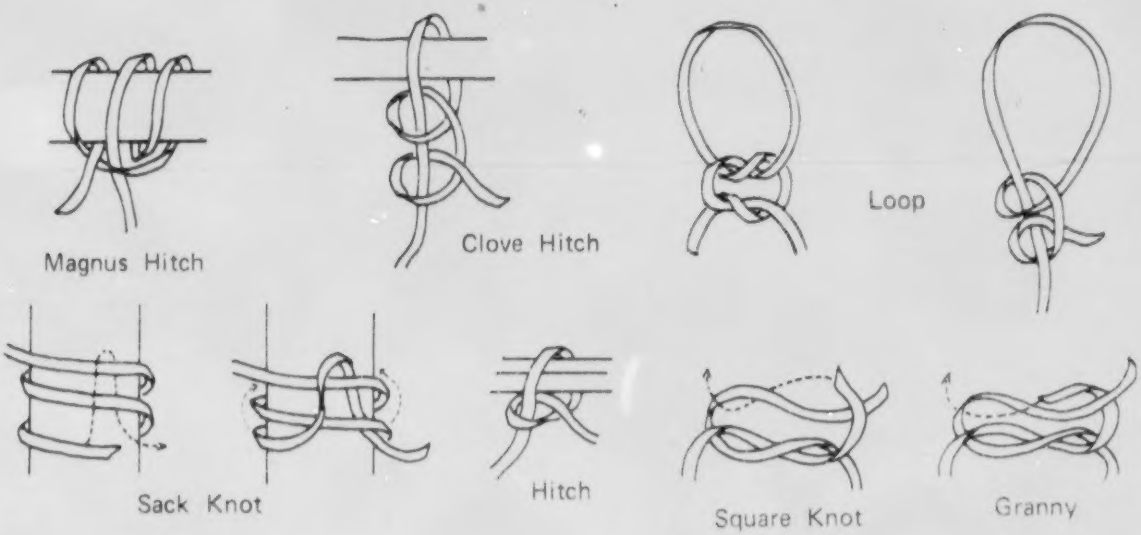


(NOTE: Always know where key to restraint is kept, or keep it with you at all times.)

6. Test for proper fit by placing flat of hand between belt and waist

(NOTE: A variety of knots can be used to secure straps. Practice different knots that are secure but can be easily untied by health worker. Figure 3.)

FIGURE 3



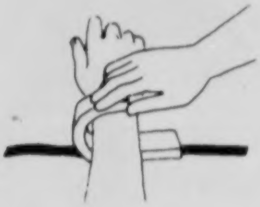
JOB SHEET #1

B. Wrist restraints

(NOTE: Restraints can be made by using gauze and a clove hitch knot.)

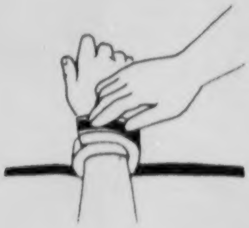
1. Place pad under limb with strap side of pad down
2. Wrap cushion of pad around limb, allowing retainer to remain loose (Figure 4)

FIGURE 4



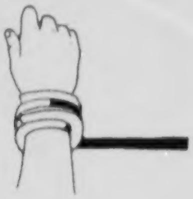
3. Wrap other end of pad around limb making it secure but not too tight (Figure 5)

FIGURE 5



4. Place retainer over pad connector and press to attach; secure strap to spring frame (Figure 6)

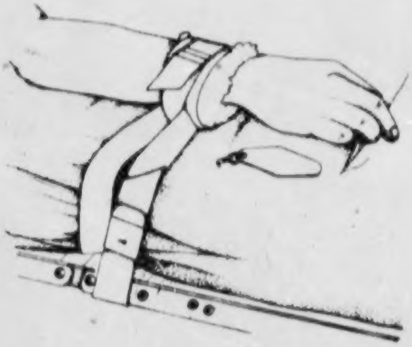
FIGURE 6



(NOTE: This restraint uses velcro to adhere the pad together.)

5. Use an extra security fleece padded restraint if extra security is needed (Figure 7)

FIGURE 7



(NOTE: Ankle restraints are also available.)

C. Mitts

(NOTE: Mitt also can be made from stockinette and tape. These restraints are used to protect patients who may possibly injure themselves if hands and fingers were loose by preventing patients from removing catheters, IV's and dressings.)

1. Place hand in mitten and secure at wrist (Figure 8)
2. Secure to bed with straps around bed spring frame (Figure 9)

(NOTE: Mitts can be made from loosely woven net or cotton material and may have a rigid layer on the palm side.)

FIGURE 8

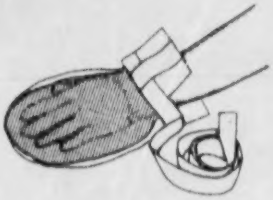
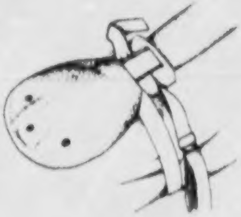


FIGURE 9



D. Vest restraints

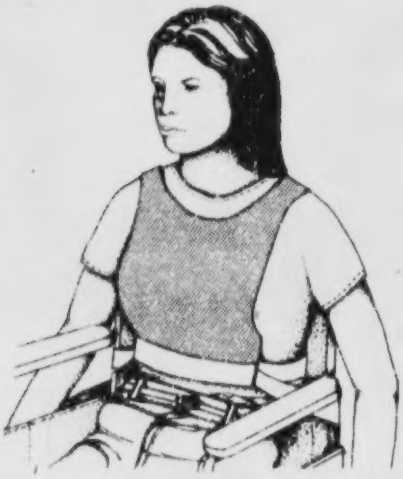
(NOTE: Vest restraints can be used in bed or in chair to give support and to secure safety.)

1. Secure patient in wheelchair by loosening waist strap and slip vest over the head

JOB SHEET #1

2. Draw waist belt to comfort and secure behind chair; slip loops over push handles (Figure 10)

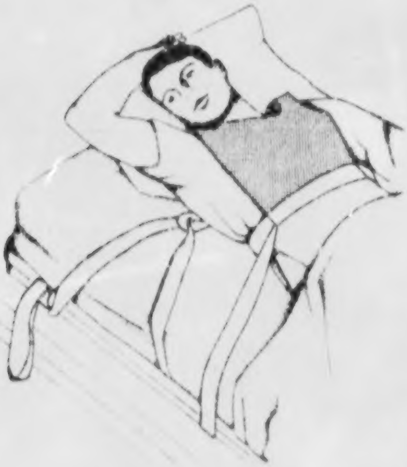
FIGURE 10



3. Secure patient in bed by fastening ties at bed spring frame or under bed

4. Prevent patient from rolling or sitting up by wrapping waist belt around frame then back through shoulder loop and secure under bed (Figure 11)

FIGURE 11



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BODY MECHANICS AND POSITIONS
UNIT IV

JOB SHEET #2--POSITION THE PATIENT

I. Equipment needed

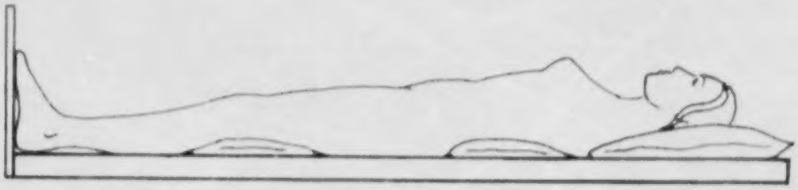
- A. Bed, made as for an occupied bed
- B. Pillows, as needed
- C. Footrest or footboard
- D. Extra linens, such as towels or bath blankets to use for support
- E. Sandbags, as needed
- F. Handrolls

II. Procedure

- A. Horizontal recumbent or supine positions (Figure 1)
  1. Place pillow under shoulder and head
  2. Place folded towel or small, firm pillow under lower back

     (NOTE: Pillow is placed under natural curve of patient's back. Check by putting hand under patient's back to determine placement.)
  3. Maintain slight flexion of knees by putting folded towels or other linen under thighs just superior to the popliteal space
  4. Support feet with footrest or covered box to prevent plantar flexion
  5. If necessary, use rolled towels or sandbags at lateral aspects of thighs to prevent outward rotation of the legs
  6. Check that bedcovers over feet are loosened to prevent plantar flexion when footrest is not used

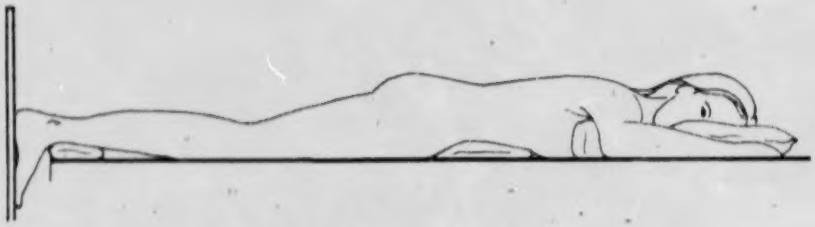
FIGURE 1



JOB SHEET #2

7. Use handrolls and support arms with pillows, as needed, to prevent contractures

FIGURE 2



B. Prone position (Figure 2)

1. Move patient to one side of bed
2. Turn patient onto side facing center of bed
3. Place small pillow below breasts for female patient; place small pillow under lower abdomen for male patient
4. Turn patient onto abdomen
5. Position arms; arm at back of head lies parallel to body with elbow flexed slightly; arm at face side is flexed at right angle
6. Place small pillow under patient's head, if desired
7. Place pillow under ankles to keep weight of legs off toes

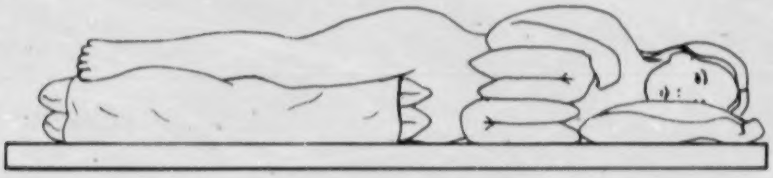
   (NOTE: Patient may be positioned so feet hang off edge of mattress. Use small folded linen under ankles to relieve strain.)

JOB SHEET #2

C. Lateral position (Figure 3)

1. Turn patient onto side and move near center of bed
2. Fold a pillow lengthwise and tuck along patient's back to keep patient from rolling backward
3. Place small pillow under patient's head
4. Flex upper leg to comfortable position; leave lower leg straight or flex slightly as desired for comfort
5. Place folded blanket or firm pillow under upper leg and foot
6. Flex lower arm at right angle at shoulder and elbow
7. Place folded pillow under upper arm

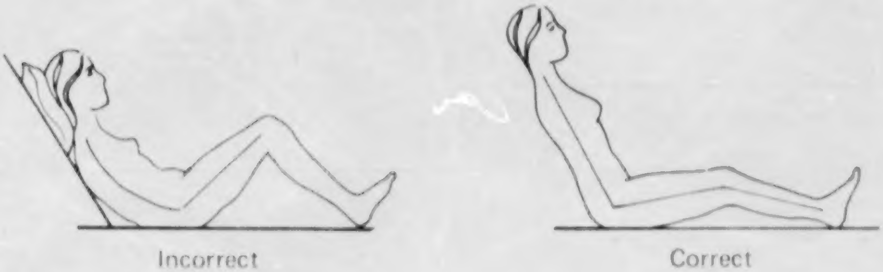
FIGURE 3



D. Fowler's position (Figure 4)

1. Place patient in supine position
2. Check to see that bend of hips is at bend of mattress

FIGURE 4


Incorrect
Correct

3. Elevate head of bed between 15° and 60°

JOB SHEET #2

4. Place body parts in good alignment

5. Provide support for body parts

   (NOTE: Use knee rest, footboard, trochanter rolls, sandbags, and/or pillows to support and maintain position.)

6. Bedcovers over feet should be loose if footrest is not used

E. Sims' or semi-prone (Figure 5)

   1. Turn patient on side

   2. Place small pillow under head

   3. Align body in good position

      a. Head, neck, and back shoulder must be in a straight line

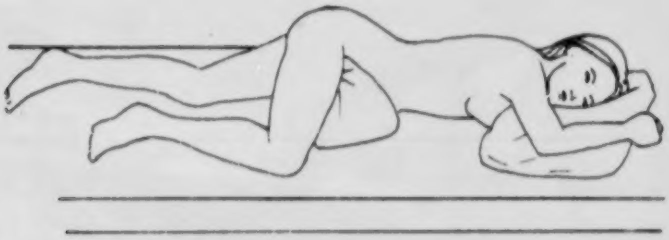
      b. Support and lift lower shoulder and flex lower arm behind patient

      c. Flex lower leg slightly

   4. Flex uppermost leg and support with pillow under knee, lower leg, and ankle

   5. Flex upper arm and support with pillow, as needed

FIGURE 5



F. Knee-chest position (Figure 6)

   1. Turn patient onto abdomen

   2. Replace top covers with bath blanket

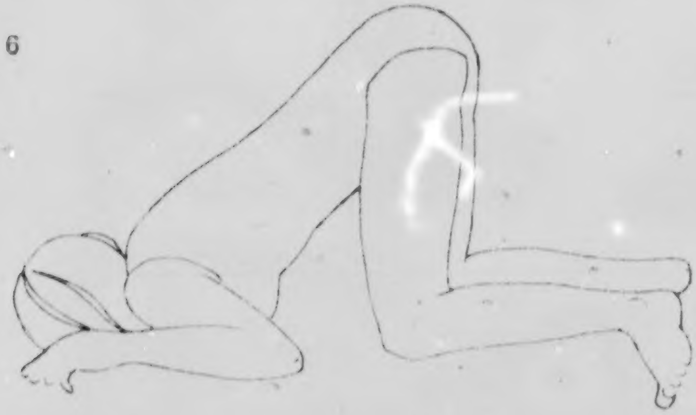
JOB SHEET #2

3. Fanfold, keeping top covers down with lower legs covered

4. Help patient into kneeling position with chest and head resting on bed

5. Tuck bath blanket around patient's thighs leaving center free to be raised during examination

FIGURE 6



G. Lithotomy (Figure 7)

1. Place patient in supine position

2. Replace top covers with bath blanket

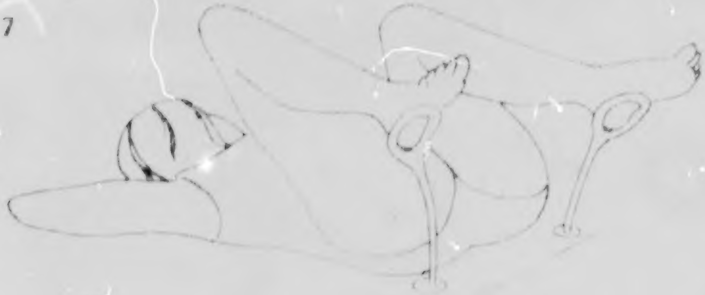
3. Flex patient's hips while abducting them

4. Flex knees acutely

5. Tuck bath blanket corners around patient's feet and legs leaving center free to be raised during examination

(NOTE: If position is to be maintained for any length of time, it may be necessary for two people to support patient's legs in the proper position.)

FIGURE 7



BODY MECHANICS AND POSITIONS
UNIT IV

JOB SHEET #3 ASSIST PATIENT TO DANGLE

(NOTE: This procedure is usually performed as the initial getting-up activity for a patient who has been ill or had surgery. Patient may be apprehensive and fearful of pain. Observe for signs of weakness or syncope.)

I. In classroom with another student playing the part of a patient, assist to dangle

II. Procedure

- A. Wash hands
- B. Identify patient and explain procedure
- C. Check pulse
- D. Move patient to side of bed; if there is an injury or weakness, work from side near the weakness
- E. Place bed in low position
- F. Elevate head of bed to help adjust patient to a sitting position
- G. Assist patient to upright position with your hands on shoulders
- H. Move other hand to opposite knee while continuing to support one shoulder with your hand and pivot patient with legs down over side of bed
- I. Provide for patient's comfort and warmth
    1. Put on slippers; place feet on footstool if patient's feet do not reach the floor
    2. Put robe on patient or cover shoulders and back with a bath blanket
    3. Place blanket over patient's legs
- J. Check pulse
- K. Watch closely for sign of weakness or fatigue
- L. Assist patient in returning to bed at end of specified period of dangling or sooner if patient is unable to tolerate procedure
    1. Remove robe and slippers
    2. Support patient's shoulders with one hand; with other hand under patient's ankles, swing legs up onto bed, pivoting body at the same time

JOB SHEET #3

    3. Ease patient down to backrest

M. Check pulse

N. Provide for patient's comfort

    1. Adjust top covers

    2. Adjust bed position and pillows

    3. Place communication device within convenient reach of patient

O. Wash hands

P. Report and record procedure and observations

BODY MECHANICS AND POSITIONS
UNIT IV

JOB SHEET #4--GET PATIENT INTO CHAIR AND WHEELCHAIR

I. Procedure for getting patient into chair

   A. Wash hands

   B. Identify patient and explain procedure

   C. Check pulse

   D. Lower bed or place footstool beside bed

   E. Assist patient to a sitting position with feet on footstool or floor

   F. Place chair at side of bed with its back toward foot of bed

   G. Assist patient in putting on robe and slippers

   H. Stand directly in front of and facing patient with broad base support

   I. Have patient place hands on your shoulders; place your hands on each side of patient below armpits

   J. Support and turn so patient's back is toward chair as patient steps to floor

   K. Bend your knees, while easing down to chair, as patient sits

   L. Cover patient's legs with blanket

   M. Check pulse

   N. Place communication device within convenient reach of patient

   O. Reverse procedure to return patient to bed

   P. Check pulse

   Q. Provide for patient's comfort; return equipment to proper place

   R. Report and record procedure and observations

II. Procedure for getting patient into wheelchair

   A. Follow Steps A through R substituting wheelchair for chair

   B. Position wheelchair and LOCK the wheels; if they cannot be locked, have someone hold chair in place

   C. Fold back footrests so patient will not step on them and tip the chair

   D. Secure patient in wheelchair

BODY MECHANICS AND POSITION
UNIT IV

JOB SHEET #5--ASSIST PATIENT TO WALK

(NOTE: Observe for sign of weakness or syncope throughout procedure.)

Procedure:

A. Wash hands

B. Identify patient and explain procedure

C. Check pulse

D. Place bed in low position or provide footstool

E. Elevate head of bed; fold down top bedding

F. Assist patient to a sitting position on side of bed

G. Assist patient in putting on robe and slippers

(NOTE: Slippers should fit well. Loose floppy shoes with slippery soles are difficult to wear and dangerous for a weakened patient to walk in.)

H. Check pulse

I. Help patient to stand

1. Have patient place feet firmly on floor or footstool and push down on mattress with hands to slide forward to edge of bed
2. Support patient's movements by placing one hand under axilla as patient stands
3. Stand in front of patient, holding arm or shoulder to aid in balancing

J. Assist patient in walking

1. Encourage patient to stand straight while walking
2. Have patient hold onto your arm for minimal support
3. Hold patient's left hand in your left hand, with your right arm holding patient around waist for moderate support
4. Have another person support patient on other side or provide chair to slide along in front of patient for moderate support

JOB SHEET #5

K. Reverse procedure to assist patient in returning to bed

L. Check pulse

M. Provide for patient's comfort; place communication device within convenient reach of patient

N. Wash hands

O. Report and record procedure and observations

BODY MECHANICS AND POSITIONS
UNIT IV

JOB SHEET #6--PUT PATIENT ON CARRIER

I. Procedure with patient who can help

- A. Replace top covers with bath blanket
- B. Place carrier close to bed and parallel with it
- C. Lock wheels of bed and carrier
- D. Steady carrier and help patient move onto it
- E. Place pillow under head
- F. Adjust bath blanket to cover patient
- G. Secure safety devices; caution patient to keep arms close to body
- H. Transport feet first at moderate speed
- I. Remain at head of carrier during transportation, observing patient for reaction

II. Procedure for helpless patient

(NOTE: This procedure requires three people.)

- A. Replace top covers with bath blanket
- B. Loosen drawsheet on both sides
- C. Roll drawsheet close to patient on carrier side
- D. Pull patient close to edge of bed using drawsheet
- E. Place carrier parallel to bed; lock wheels on carrier and bed
- F. First person puts one arm under patient's head and grasps to top corner of drawsheet with other hand
- G. Second person grasps drawsheet above and below patient's buttocks
- H. Third person grasps lower corner of drawsheet and places other arm under patient's legs
- I. Pull patient onto carrier at prearranged signal
- J. Roll both sides of drawsheet close to patient's body

JOB SHEET #6

K. Adjust bath blanket and pillow

L. Secure safety devices

III. Procedure for three-person lift

A. Replace top covers with bath blanket folded close to patient

B. Place carrier at right angles to patient's bed

C. To coordinate movements, the three persons must work by prearranged signals called by the person who moves patient's head

D. At the count of "one," three people observing proper body mechanics, bend their knees and place their arms under patient

1. Person No. 1 places one arm under neck and shoulders and the other arm under patient's back

2. Person No. 2 places one arm under small of the back and the other arm under buttocks

3. Person No. 3 places one arm just below buttocks and the other arm under legs

E. At the count of "two," the three persons rock back and simultaneously lift and roll patient to their chests

F. At the count of "three," they rise, step back, and pivot toward stretcher

G. At the count of "four," they bend their knees and rest their elbows on stretcher

H. At the count of "five," each lifter extends their arms allowing patient to roll onto stretcher

I. At the count of "six," each lifter withdraws arms

J. Adjust bath blanket to cover patient

K. Secure safety devices

BODY MECHANICS AND POSITIONS
UNIT IV

JOB SHEET #7--USE CORRECT POSTURE

I. Check standing posture

   A. Feet parallel, slightly apart with weight balanced evenly on heels, outside borders, and balls of feet

   B. Knees straight and relaxed, neither flexed nor hyperextended

   C. Hips tucked in

   D. Abdomen flat

   E. Chest up

   F. Shoulders free and easy, neither forward nor backward

   G. Head centered over body with chin level

   H. Arms hanging relaxed at sides

   I. Back straight, neither too curved nor too flat

   (NOTE: If student is unable to achieve good body alignment, exercises may be needed to strengthen certain muscle groups.)

II. Check walking gait

   A. Feet parallel, slightly apart with toes pointing straight ahead

   B. Roll foot from heel to toe along outer border

   C. As one leg advances, weight is gradually shifted forward

   D. Relaxed, but erect, posture is maintained with arms swinging easily in rhythm with step

   (NOTE: Maintaining good alignment of ankle and foot strengthens muscles that support the foot and ankle, thus making walking less tiring.)

III. Check sitting posture

   A. Stand close to chair and when possible place one foot slightly under chair

   B. Flex hips and knees, thus trunk is inclined forward to easily distribute weight

   C. Lower body weight easily and smoothly by using leg muscles

JOB SHEET #7

D. While sitting

1. Back is held erect
2. Weight falls on tuberosities of ischia with segments of spine directly above ischia
3. Chair seat should be high enough to permit feet to rest flat on floor but not high enough to cause pressure on the nerves and blood vessels on the under surface of thighs

BODY MECHANICS AND POSITIONS
UNIT IV

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with body mechanics listed below to the correct definitions by placing the appropriate numbers in the blanks provided.

_____a. State of increased discomfort and decreased efficiency resulting from prolonged exertion

_____b. Relationship of body segments to each other

_____c. Coordination of body alignment, balance, and movement

_____d. Lacking muscle tone

_____e. Alignment and position of the body

_____f. Bodily injury from excessive tension, effort, or use

1. Body mechanics
2. Strain
3. Fatigue
4. Posture
5. Alignment
6. Flaccid

2. Select from the list below reasons why health assistants should use proper body mechanics by placing an "X" in the appropriate blanks.

_____a. Promotes good posture

_____b. Promotes spinal fusion

_____c. Sets example for others, particularly patients

_____d. Provides postural drainage

_____e. Saves energy by making work easier

_____f. Increases efficiency

_____g. Stimulates muscle atrophy

_____h. Prevents muscle strain

_____i. Improves health and appearance

_____j. Provides hypostasis

3. State five principles of body mechanics.

a. ______________________________

b. ______________________________

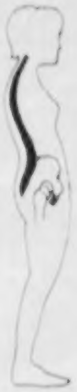
c. ______________________________

d. ______________________________

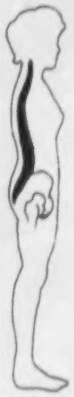
e. ______________________________

4. Identify correct body alignment for standing, sitting, or lifting in the drawings below by placing an "X" in the appropriate blanks.

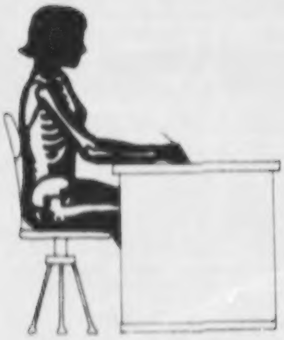
a. ____



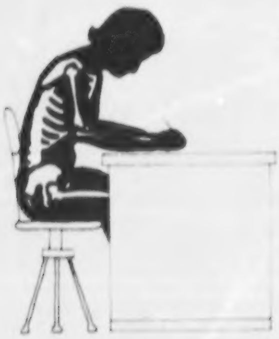
b. ____



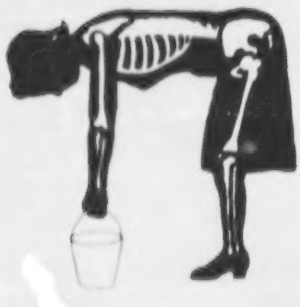
c. ____



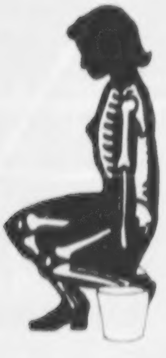
d. ____



e. ____



f. ____



5. Match terms associated with body positions and activity to their correct definitions. Place the appropriate numbers in the blanks provided.

______ a. Above

______ b. Loss or impairment of ability to move parts of body

______ c. Extent to which joint can be extended and flexed

______ d. Nearest to origin of a structure

______ e. Toward side

______ f. Below

______ g. Pertaining to posterior surface of the knee

______ h. Abnormal shortening of muscle, tendon, or scar tissue producing deformity or distortion which may become permanent

______ i. Pertaining to the outward part

______ j. Sudden interruption of blood supply to some vital center in the brain

______ k. Decrease in size due to disuse, disease, injury, or weakness

______ l. Lying down

______ m. Respiratory condition in which breathing is possible only when person sits or stands in an erect position

______ n. Wound produced by tearing of body tissue

______ o. Lung inflammation caused by constantly remaining in same position

______ p. Farthest from origin of a structure

______ q. Near midline

______ r. Toward back

______ s. Toward front

______ t. Lesion of the skin due to local interference with circulation

______ u. Abnormal accumulation of fluid in tissues affecting lower portions of the body most severely

1. Contracture
2. Range-of-motion
3. Popliteal space
4. Cerebrovascular accident
5. Paralysis
6. Proximal
7. Lateral
8. Inferior
9. Peripheral
10. Orthopnea
11. Decubitus ulcer
12. Medial
13. Hypostatic pneumonia
14. Dependent edema
15. Posterior
16. Atrophy
17. Distal
18. Anterior
19. Laceration
20. Recumbent
21. Superior

6. Select from the list below ways exercise promotes functioning of the patients body by placing an "X" in the appropriate blanks.

   ______a. Stimulates appetite

   ______b. Helps prevent contractures

   ______c. Helps maintain blood pressure and efficient circulation

   ______d. Reduces fatigue

   ______e. Preserves strength, tone, and elasticity of muscles

   ______f. Relieves pressure areas which aid in preventing decubitus ulcers

   ______g. Aids elimination

   ______h. Decreases hypotension

   ______i. Promotes strength and hardness of bones

   ______j. Promotes diuresis

   ______k. Aids in preventing emboli, thrombi, and hypostatic pneumonia

7. Describe the development and treatment of contractures.

____

____

____

____

____

____

____

____

____

____

8. State four nursing measures that may prevent or decrease effects of immobility on the body.

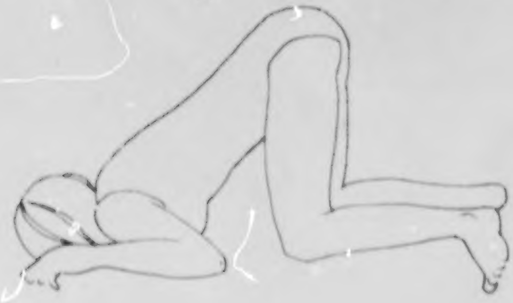
   a. ____

   b. ____

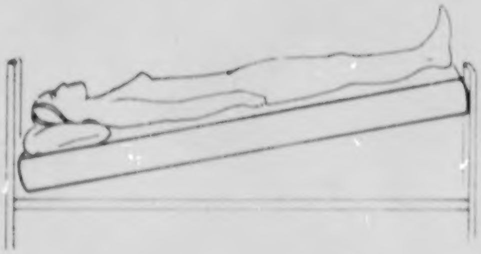
   c. ____

   d. ____

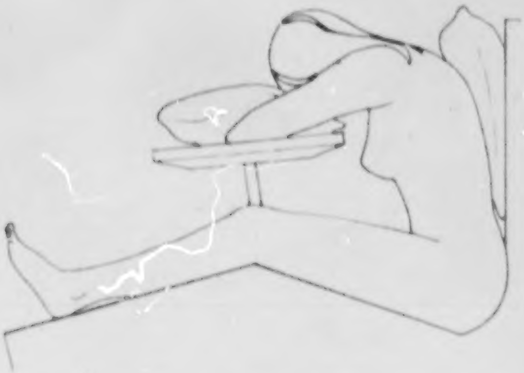
9. Identify various body positions shown in the diagram below by writing the correct names in the blanks provided.



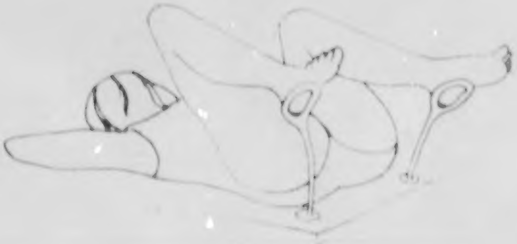
a. ______________________________



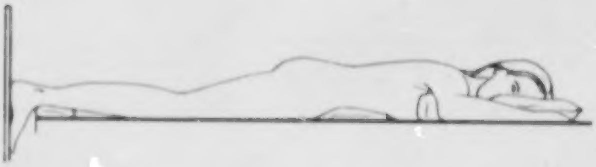
b. ______________________________



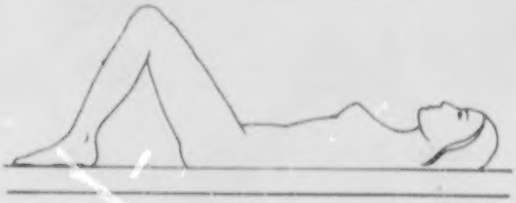
c. ______________________________



d. ______________________________

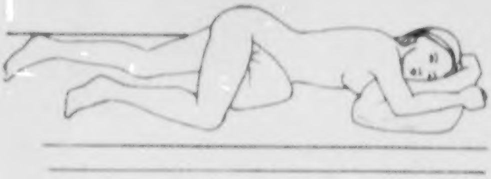


e. ______________________________

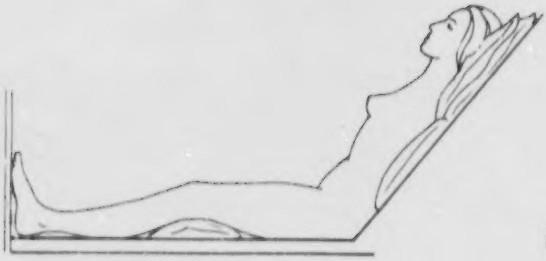


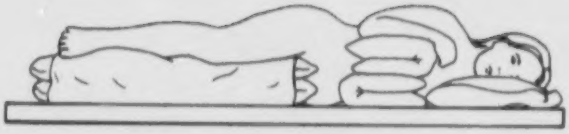
f. ______________________________

g. ______________________________



h. ______________________________





i. ______________________ j. ______________________

10. List five ways of maintaining bed patient's safety.

a. ______________________

b. ______________________

c. ______________________

d. ______________________

e. ______________________

11. Demonstrate the ability to:

a. Apply various restraints.

b. Position the patient.

c. Assist patient to dangle.

d. Get patient into chair and wheelchair.

e. Assist patient to walk.

f. Put patient on carrier.

g. Use correct posture.

(NOTE: If the above activities have not been accomplished prior to the test, ask your instructor when they should be completed.)

BODY MECHANICS AND POSITIONS
UNIT IV

ANSWERS TO TEST

1. a. 3
   b. 5
   c. 1
   d. 6
   e. 4
   f. 2

2. a, c, e, f, h, i, j

3. Any five of the following:

   a. Broaden base of support by standing with feet slightly apart to give more balance and stability

   b. Maintain good alignment of body parts to reduce strain and fatigue

   c. Change position and type of activity to help maintain muscle tone and lessen fatigue

   d. Carry weight close to body to use less effort

   e. Improve circulation in legs and feet and reduce muscle strain by using proper body alignment while sitting

   f. Pull, slide, or roll object rather than lift it to use less effort

   g. Move heavy objects on a smooth surface rather than on a wrinkled or rough surface

   h. Use mechanical objects whenever possible to lift and turn heavy or helpless patients

   i. Encourage patients to help themselves as much as possible

4. b, c, f

5. a. 21
   b. 5
   c. 2
   d. 6
   e. 7
   f. 8
   g. 3
   h. 1
   i. 9
   j. 4
   k. 16
   l. 20
   m. 10
   n. 19
   o. 13
   p. 17
   q. 12
   r. 15
   s. 18
   t. 11
   u. 14

6. a, b, c, d, e, f, g, i, k
7. Description should include the following:
    - a. Development
        1. Normal mobility is dependent on free movement of joints and muscles
        2. Disuse of joints and muscles results in connective tissue becoming less pliable, a process called fibrosis
            - a. Poor position in bed can lead to fibrosis
            - b. Fibrosis can occur within a week's time and can lead to contractures
    - b. Treatment
        1. Prevention of contractures is the best treatment
        2. Contractures are very hard to prevent once they begin
8. a. Proper alignment of body
    - b. Changing position
    - c. Joint mobility exercises
    - d. Environmental structuring
9. a. Knee-chest position
    - b. Trendelenberg position
    - c. Orthopneic position
    - d. Lithotomy position
    - e. Prone position
    - f. Dorsal recumbent position
    - g. Horizontal recumbent or supine position
    - h. Sim's or semi-prone position
    - i. Fowler's position
    - j. Lateral position
10. Any five of the following:
    - a. Use safety devices to protect patient, as needed
    - b. Store medications out of reach of patients who are not responsible

  c. Control smoking and use of matches and lighters

  d. Be familiar with emergency care equipment and procedures

  e. Keep equipment and belongings that patient needs within reach

  f. Keep bed linen clean, dry, and wrinkle free to minimize pressure areas

  g. Check frequently patients receiving hot or cold applications

  h. Keep beds locked to prevent from rolling

  i. Fold gatch handles back to bed to prevent injury to patient and health personnel

  j. Use electrical equipment safely; observe patient closely when using any electrical appliances

11. Performance skills evaluated to the satisfaction of the instructor

VITAL SIGNS
UNIT V

UNIT OBJECTIVE

After completion of this unit, the student should be able to select from a list factors that influence body temperature. The student should also be able to identify sites to take temperature, respiration, pulse, and blood pressure and demonstrate the ability to take temperature, respiration, pulse, blood pressure, and record them correctly. This knowledge is evidenced through completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with vital signs to their correct definitions.
2. Complete a chart showing indications for specific temperature sites.
3. Match temperature ranges to their correct terms.
4. Name factors which influence body temperature.
5. Identify sites where pulse may be taken.
6. Match average pulse rates to specific groups.
7. Select from a list factors which influence heart rate and pulse rate.
8. Select from a list factors affecting respiration.
9. Match terms used to describe respiration to their correct definitions.
10. Name factors affecting blood pressure.
11. Match types of blood pressure measurements to their correct definitions.
12. Name sites where blood pressure may be taken.
13. Read Fahrenheit thermometers.
14. Read Celsius thermometers.
15. Convert Fahrenheit and Celsius thermometer readings.

16. Record temperature, pulse, respirations, and blood pressure.

17. Demonstrate the ability to:

    a. Take oral temperature.

    b. Take rectal temperature.

    c. Take axillary temperature.

    d. Take pulse and respirations.

    e. Take apical/radial pulse.

    f. Clean thermometers.

    g. Take blood pressure.

VITAL SIGNS
UNIT V

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information, assignment, and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information sheet.

   F. Discuss and assist with assignment sheets.

   G. Provide graphic sheets for Assignment Sheet #4.

   H. Demonstrate and discuss procedures outlined on the job sheets.

   I. Invite electrocardiogram technician to visit class to discuss cardiograms or career opportunities.

   J. Offer to have students take temperatures, pulses, respirations, and blood pressures for other students or staff members during a break or laboratory practice.

   K. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Assignment sheets

      1. Assignment Sheet #1--Read Fahrenheit Thermometers

      2. Assignment Sheet #2--Read Celsius Thermometers

      3. Assignment Sheet #3--Convert Fahrenheit and Celsius Thermometer Readings

      4. Assignment Sheet #4--Record Temperature, Pulse, Respirations, and Blood Pressure

   D. Answers to assignment sheets

E. Job sheets

1. Job Sheet #1--Take Oral Temperature
2. Job Sheet #2--Take Rectal Temperature
3. Job Sheet #3--Take Axillary Temperature
4. Job Sheet #4--Take Pulse and Respirations
5. Job Sheet #5--Take Apical/Radial Pulse
6. Job Sheet #6--Clean Thermometers
7. Job Sheet #7--Take Blood Pressure

F. Test

G. Answers to test

III. Unit references:

A. Culver, Vivian M. *Modern Bedside Nursing.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1969.

B. Langley, et al. *Dynamic Anatomy and Physiology.* New York: McGraw-Hill Book Company, 1969.

C. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

D. Thompson, Ella M. and Rosdahl, Caroline B. *Textbook of Basic Nursing.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1973.

E. Wood, Lucile A. *Nursing Skills for Allied Health Services.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1972.

IV. Filmstrips:

A. "Temperature, Pulse, and Respiration." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

B. "Blood Pressure." Trainex Corporation.

VITAL SIGNS
UNIT V

INFORMATION SHEET

I. Terms and definitions

- A. Febrile-Feverish; pertaining to a fever
- B. Hypothermia-Temperature below normal body temperature
- C. Pulse-Heartbeat as felt through artery walls
- D. Rate-Number of pulses, heartbeats, or respirations per minute
- E. Rhythm-Regularity or irregularity of pulses, heartbeats, or respirations
- F. Quality-Volume and strength of pulse beats
- G. Arrhythmia-Uneven intervals between pulses or heartbeats
- H. Apical pulse-Heart rate counted at the apex of the heart by using a stethoscope
- I. Pulse deficit-Difference between pulse counts taken simultaneously at two sites, usually radial and apical pulses
- J. Tachycardia-Abnormally rapid heart rate
- K. Bradycardia-Abnormally slow heart rate
- L. Respiration-Exchange of oxygen and carbon dioxide in the body
- M. Blood pressure-Force which blood exerts against vessel wall as heart beats
- N. Body temperature-Balance between heat produced and heat lost by the body
- O. Sphygmomanometer-Instrument used to measure blood pressure
- P. Stethoscope-Instrument used to listen to sounds produced by heart, lungs, and other internal organs
- Q. Hypertension-High blood pressure
- R. Hypotension-Low blood pressure

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INFORMATION SHEET

II. Indications for specific temperature sites

A. Oral cavity

(NOTE: This is the simplest, most convenient and most comfortable method.)

1. Patients with diarrhea
2. Patients with rectal distention from fecal material
3. Patients with rectal or perineal surgery

B. Rectal

(NOTE: This is the most accurate and safest method. It is usually used for children under six years of age.)

1. Patients who have difficulty in breathing
2. Patients with oral or nasal surgery, infection, or disease
3. Patients with confusion, mental illness, senility or who are unconscious
4. Patients with extreme weakness
5. Patients to whom oxygen is being administered

(NOTE: Axillary temperature is used only when temperature cannot be taken orally or rectally and is least accurate.)

III. Body temperature ranges

A. Normal oral-36.4° to 37.2°C (97.6° to 99°F)

B. Normal rectal-37.5°C (99.6°F)

C. Normal axillary-36.4°C (97.6°F)

D. Subnormal (oral)-Below 36.2°C (97°F)

E. Moderate fever (oral)-37.7° to 39.4°C (100° to 103°F)

F. High fever (oral)-39.4° to 40.5°C (103° to 105°F)

(NOTE: Rectal temperatures average one degree higher than oral temperatures; axillary temperatures average one degree lower than oral.)

INFORMATION SHEET

IV. Factors which influence body temperature

   A. External environment

      Examples: Room temperature, ventilation, amount of clothing, and humidity affect body temperature

   B. Internal environment

      (NOTE: Body temperature is affected by such things as amount of adipose tissue, illness, and fluid and electrolyte balance.)

   C. Sex

      (NOTE: Women usually have a higher temperature than men.)

   D. Age

      (NOTE: In infants and young children, the heat-regulating mechanism is not fully developed; in the aged, the heat-regulating mechanism becomes less efficient.)

   E. Strong emotions

      (NOTE: Excitement, anxiety, nervousness, and other emotions cause increased activity of the secreting glands which increases heat production.)

   F. Time of day

      (NOTE: Body temperature is usually highest in mid-afternoon and lowest during the night.)

   G. Exercise and digestive processes

      (NOTE: Increased activity elevates body temperature.)

   H. Infection or disease

      (NOTE: Infection and disease processes may increase or decrease body temperature.)

   I. Hot or cold foods

      (NOTE: Hot or cold foods taken within fifteen to thirty minutes prior to taking an oral temperature will cause an inaccurate reading.)

   J. Mouth breathing

      (NOTE: The dry cooled mouth of a mouth-breathing person will not register an accurate temperature.)

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INFORMATION SHEET

K. Smoking

(NOTE: Smoking prior to an oral temperature taking will give an inaccurate reading.)

V. Sites for taking pulse

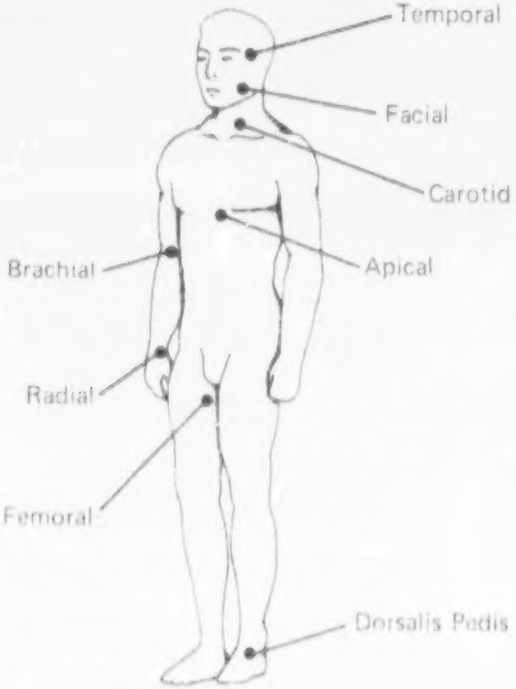
A. Temporal

B. Facial

C. Carotid

D. Apical

E. Dorsalis pedis



F. Femoral

G. Radial

H. Brachial

VI. Range of average pulse rates for specific groups

A. Men-60 to 70 beats per minute

B. Women-65 to 80 beats per minute

INFORMATION SHEET

- C. Children over age seven–72 to 90 beats per minute
- D. Children age one to seven–80 to 120 beats per minute
- E. Infants 110 to 130 beats per minute

VII. Factors which influence heart rate and pulse rate

- A. Activity
- B. Emotions
- C. Some drugs

  (NOTE: Caffeine increases and digitalis decreases heart rate.)
- D. Smoking
- E. Endocrine disturbances

  (NOTE: Hyperthyroidism and hypothyroidism influence heart rate.)
- F. Elevated temperature

  (NOTE: Heart rate usually increases proportionately as temperature increases.)
- G. Disorders of the heart and circulatory system

VIII. Factors affecting respiration

- A. Age

  (NOTE: Respiration rate for newborns may be forty per minute while the normal adult rate is fourteen to eighteen per minute.)
- B. Sex

  (NOTE: Respiration rate is usually faster in women.)
- C. Exercise
- D. Pain
- E. Fever
- F. Emotions
- G. Heart disease
- H. Respiratory disease
- I. Drugs

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INFORMATION SHEET

IX. Terms used to describe respiration

- A. Eupnea--Normal breathing
- B. Dyspnea--Difficult or labored breathing
- C. Apnea--Temporary cessation of breathing
- D. Orthopnea--Breathing possible only when person sits or stands in an erect position
- E. Cheyne-Stokes--Uneven respirations from strong to weak with intervals of apnea
- F. Rales--Bubbling or rattling sounds caused by mucus in the air passages as in bronchitis or pneumonia
- G. Costal--Breathing accomplished chiefly by rib muscles

X. Factors affecting blood pressure

- A. Condition of the artery and arteriole walls

  (NOTE: Blood pressure usually increases with age.)
- B. Rate of heartbeat
- C. Exercise
- D. Emotions
- E. Sex

  (NOTE: Blood pressure is usually higher in women.)
- F. Hemorrhage
- G. Shock
- H. Drugs
- I. Endocrine activity
- J. Altitude
- K. Smoking
- L. Site where taken

INFORMATION SHEET

XI. Types of blood pressure measurement

A. Systolic pressure--Pressure at its peak during the contraction of the heart, the systole

B. Diastolic pressure--Pressure at its lowest when heart is relaxed, the diastole

C. Pulse pressure--Difference between systolic and diastolic pressure

(NOTE: Normal values for the young adult are: systolic, 120 mm Hg; diastolic, 80 mm Hg; and pulse pressure, approximately 40 mm Hg. Pulse pressure more than 50 or less than 30 mm Hg is considered abnormal.)

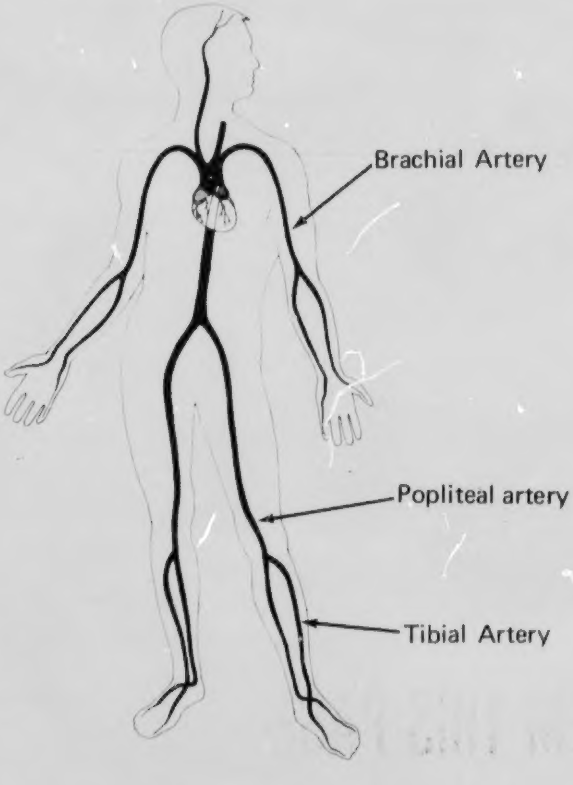
XII. Sites for taking blood pressure

A. Over brachial artery on the inner surface of the elbow

B. In the popliteal space with cuff applied above knee

C. In lower leg over the tibial artery with cuff applied below knee

(NOTE: When blood pressure is not taken in the arm, the site should be recorded on patient's chart.)



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VITAL SIGNS
UNIT V

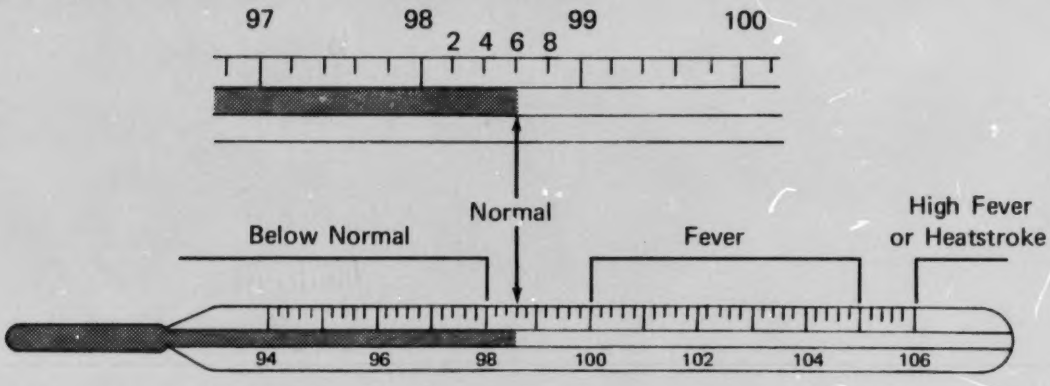
ASSIGNMENT SHEET #1--READ FAHRENHEIT THERMOMETERS

The clinical thermometer measures body temperature to the nearest two-tenths of a degree.

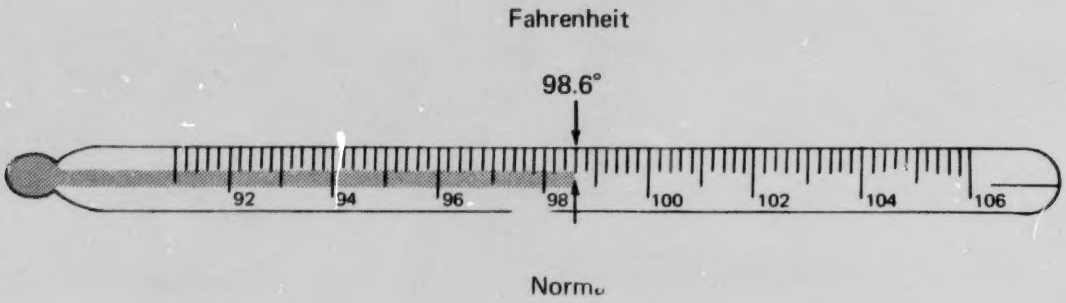
Procedure

a. Hold thermometer at eye level. Rotate thermometer until you can clearly see column of mercury

b. Observe markings called calibrations on the scale which is at upper side of the column of mercury. Remember that each of the long lines represents a full degree and the four short lines represent (0.2) 2/10 of a degree. Only even numbered degrees are named on a Fahrenheit clinical thermometer, that is 96°, 98°, 100°, and so on



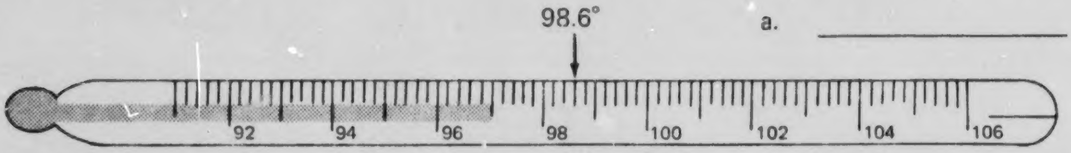
c. If mercury column ends at one of the short lines, look to see which long line is immediately left. That will tell you the degree of temperature, for example 98°F mark, the temperature is 98.4°F. Temperature may also be written 98^4



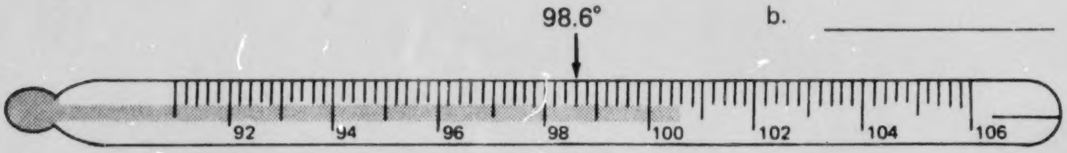
ASSIGNMENT SHEET #1

1. Write these thermometer readings in the blanks to the right

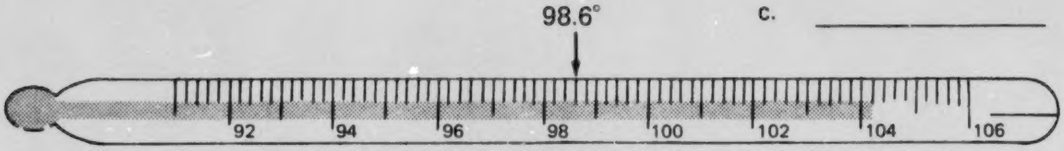
a. ____________________



b. ____________________

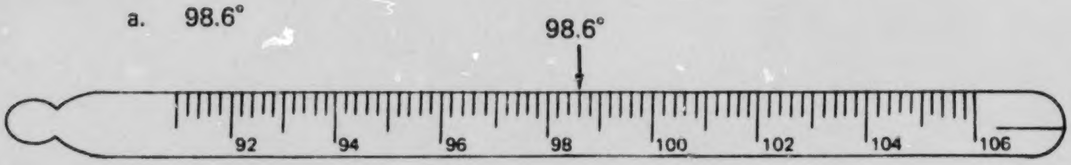


c. ____________________

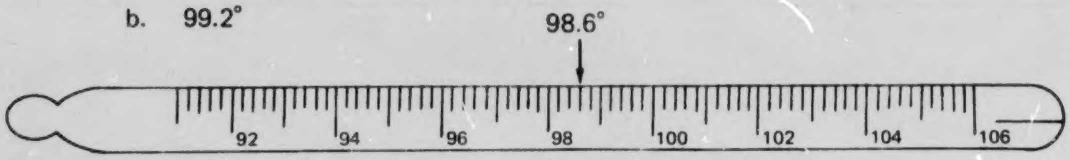


2. Mark the temperature readings on these thermometers below

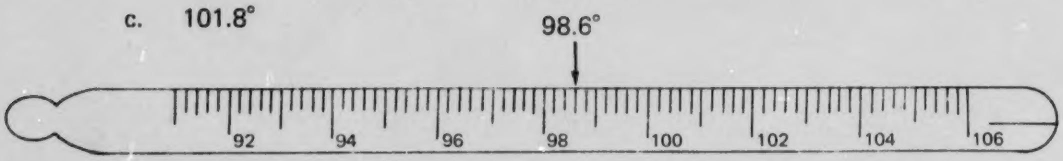
a. 98.6°



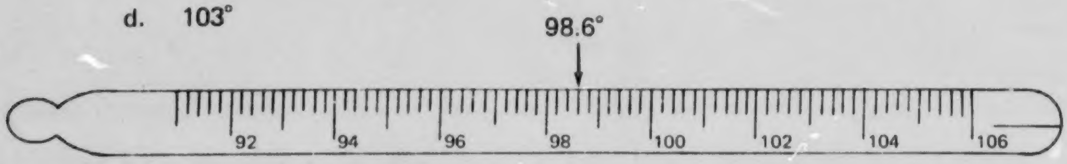
b. 99.2°



c. 101.8°



d. 103°

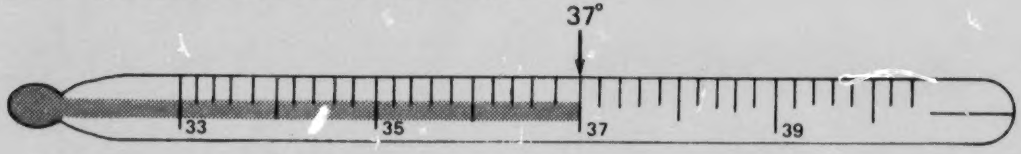


VITAL SIGNS
UNIT V

ASSIGNMENT SHEET #2--READ CELSIUS THERMOMETERS

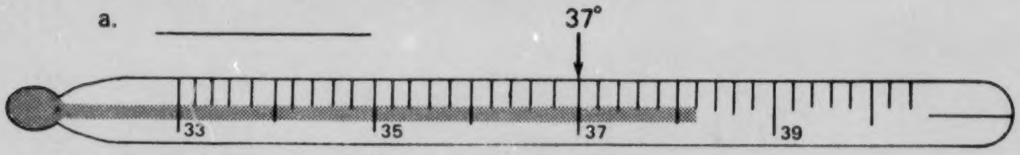
Observe calibrations on the celsius thermometer. Remember that each of the long lines represents a full degree and each short line represents .2 (2/10) of a degree. Only odd numbered degrees are indicated by number on the celsius clinical thermometer.

(NOTE: The average normal temperature is 37°C.)

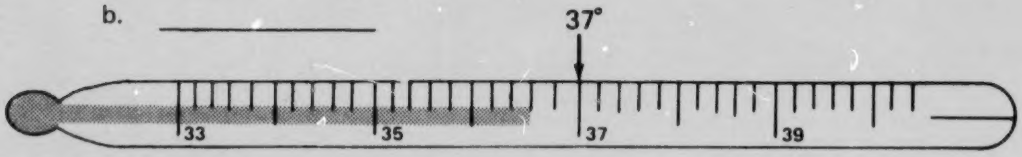


1. What are these temperature readings?

a. ______________

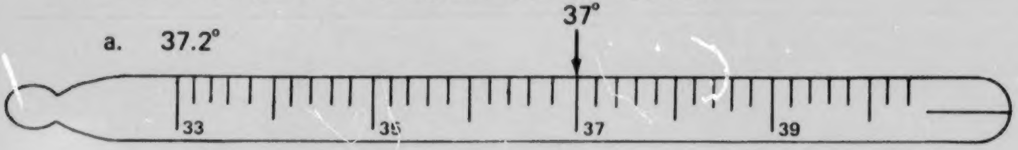


b. ______________

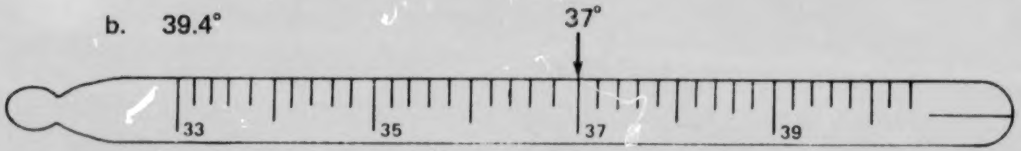


2. Mark the temperature readings on these thermometers.

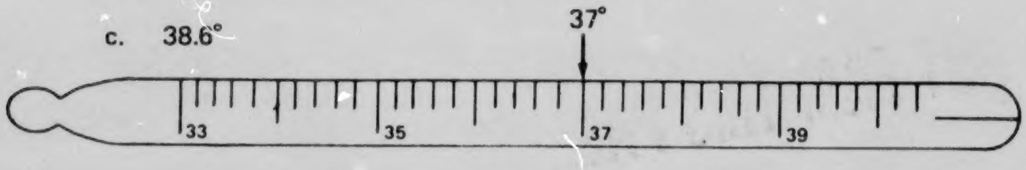
a. 37.2°



b. 39.4°



c. 38.6°

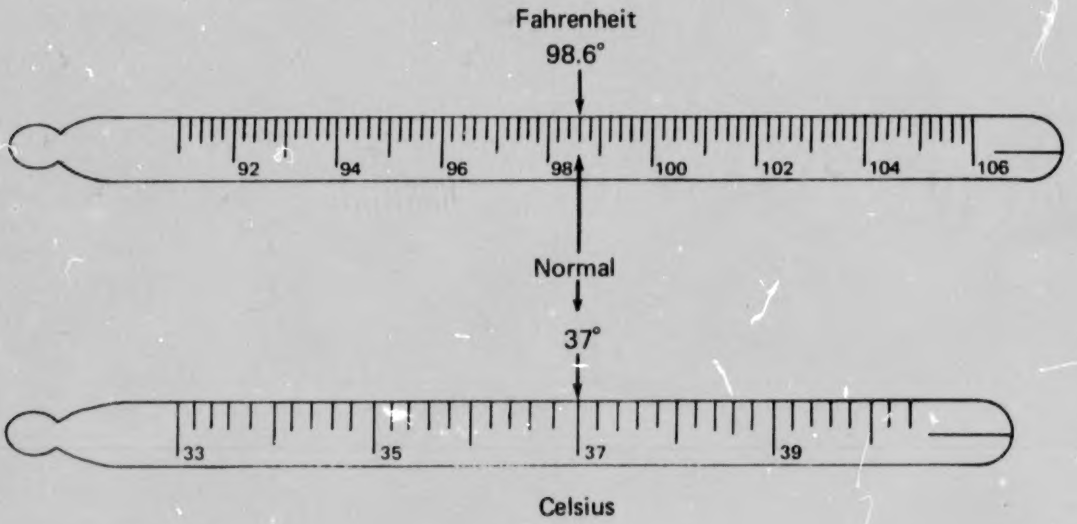


VITAL SIGNS
UNIT V

ASSIGNMENT SHEET #3--CONVERT FAHRENHEIT AND CELSIUS THERMOMETER READINGS

One thermometer is marked with either of two scales of measurement, Fahrenheit (F) or Celsius (C). Fahrenheit is more commonly used today but the use of Celsius thermometers is becoming more common.

1. In order to convert Fahrenheit readings to Celsius, subtract 32 from the reading and multiply by 5/9; thus, $C^\circ = 5/9\ (F^\circ - 32)$
2. To convert Celsius to Farenheit, multiply the Celsius reading by 9/5 and add 32; thus, $F^\circ = (C^\circ \times 9/5) + 32$



3. Solve the following problems:

a. 99.2°F = ______________ °C

b. 102°F = ______________ °C

c. 97°F = ______________ °C

d. 39.4°C = ______________ °F

e. 38°C = ______________ °F

f. 37°C = ______________ °F

VITAL SIGNS
UNIT V

ASSIGNMENT SHEET #4--RECORD TEMPERATURE, PULSE, RESPIRATIONS, AND BLOOD PRESSURE

Accurate measurement and recording of vital signs is an important aid in the evaluation of a patient's condition. Vital signs may be checked only once or twice a day but in cases of severe illness or post-operative conditions, they will be checked more often as ordered by physician or charge nurse.

Record the following TPRs and BPs on a graphic sheet

8 a.m.	99.2 - 84 - 20	120/80
Noon	100.4 - 88 - 22	126/82
4 p.m.	102.6 - 102 - 28	132/86
8 p.m.	104.2^R - 128 - 32	140/98
10 p.m.	105^R - 136 - 38	
Midnight	103.8 - 130 - 36	144/100
2 a.m.	103 - 126 - 34	
4 a.m.	101.4 - 120 - 30	138/92
8 a.m.	99 - 92 - 24	128/88

VITAL SIGNS
UNIT V

ANSWERS TO ASSIGNMENT SHEETS

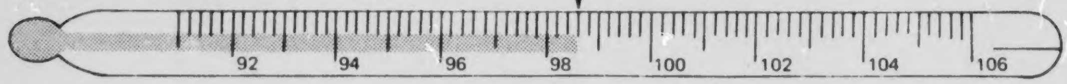
Assignment Sheet #1

1. a. 97°F

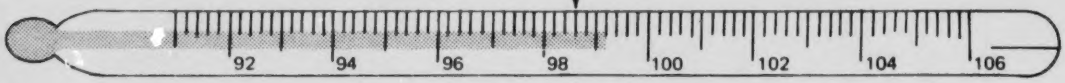
   b. 100.6°F

   c. 104.2°F

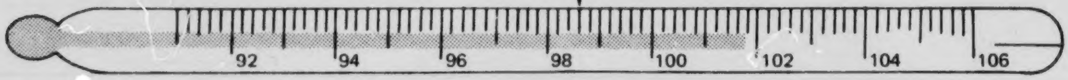
2. a. 98.6°



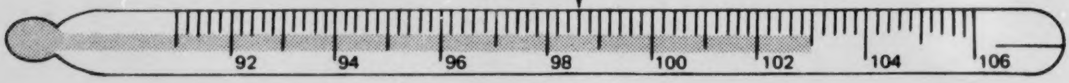
b. 99.2°



c. 101.8°



d. 103°

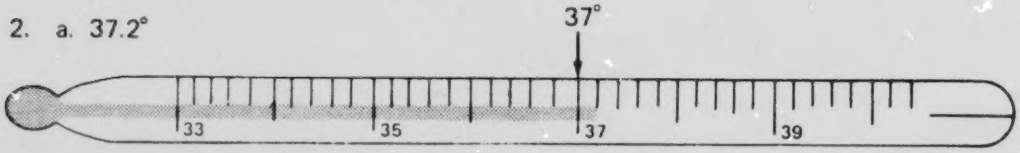


Assignment Sheet #2

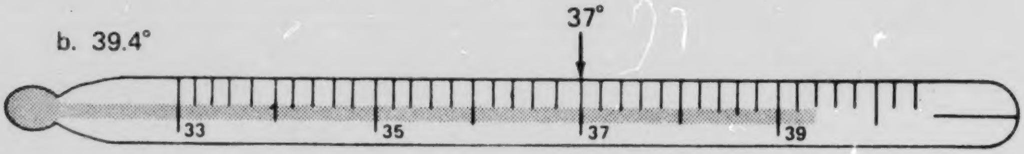
1. a. 38.2°C

   b. 36.6°C

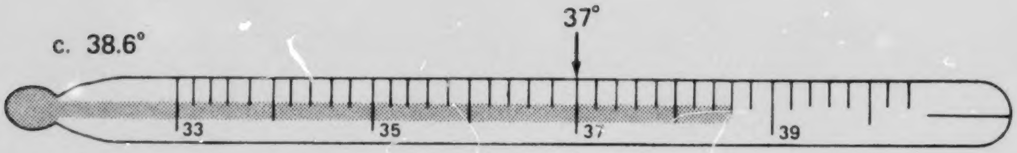
2. a. 37.2°



b. 39.4°



c. 38.6°



Assignment Sheet #3

3. a. 37.4°C
   b. 39°C
   c. 36°C
   d. 103°F
   e. 100.4°F
   f. 98.6°F

Assignment Sheet #4--Evaluated to satisfaction of instructor

VITAL SIGNS
UNIT V

JOB SHEET #1--TAKE ORAL TEMPERATURE

I. Equipment needed

   A. Mercury-type thermometer and holder with antiseptic solution or electronic thermometer with plastic sheaths

   B. Watch with second hand

   C. Paper and pencil

   D. Clean tissue

II. Procedure for mercury-type thermometer

   A. Wash hands

   B. Assemble equipment and take to bedside

   C. Identify patient and explain procedure

   (CAUTION: Do not take temperature if patient has recently taken hot or cold drink or is smoking.)

   D. Remove thermometer from container, holding near the end opposite mercury bulb; shake mercury down to 95°F or below

   E. Place mercury bulb under patient's tongue; ask patient to keep lips closed without biting thermometer; leave thermometer in place for three minutes; remain with patient if necessary

   (NOTE: Pulse and respirations may be counted at this time.)

   F. Remove and wipe thermometer with tissue from stem to bulb; discard tissue

   G. Read thermometer and record reading on paper immediately

   H. Recheck temperature, if indicated

   I. Care for thermometer

      1. Shake mercury down

      2. Clean thermometer starting from the top and work downward using a twisting motion and place thermometer in holder

      (NOTE: Use institution's procedure for cleaning thermometer.)

      3. Replace equipment in designated area

JOB SHEET #1

J. Wash hands

K. Record temperature

L. Report unusual temperature to supervisor

III. Procedure for electric thermometer

A. Wash hands

B. Assemble equipment

C. Activate electric thermometer according to instructions

D. Put on clean protective sheath

E. Place tip of probe under patient's tongue for required length of time and record temperature on paper

F. Discard protective sheath

G. Recheck temperature, if indicated

H. Replace equipment in designated area

I. Wash hands

J. Report unusually high or low temperature to supervisor

K. Record temperature

VITAL SIGNS
UNIT V

JOB SHEET #2--TAKE RECTAL TEMPERATURE

I. Equipment needed

   A. Container with clean rectal thermometer

   B. Clean tissue

   C. Lubricant

   D. Paper and pen

   E. Watch with second hand

II. Procedure

   A. Wash hands

   B. Assemble equipment

   C. Identify patient and explain procedure

   D. Provide privacy

   E. Position patient

      1. Place adult patient on side and flex upper knee

      2. Place child on abdomen with face to side unless physical condition makes this inadvisable

   F. Expose rectal area

   G. Raise upper buttock so anus is clearly seen and insert lubricated bulb gently into rectum about 3.5 cm (1 1/2 inches) in adult

   (NOTE: Rectal thermometer in children and infants should be inserted approximately 1/2 - 1 inches.)

   H. HOLD thermometer in place for three to five minutes

   (CAUTION: Do not leave patient while rectal temperature is being taken. If the patient moves and the thermometer is not being held, it can slip inside and injure the rectum or require surgical removal.)

   I. Remove thermometer; wipe with clean tissue from stem to bulb; discard tissue

   J. Read thermometer

JOB SHEET #2

K. Wash thermometer in cool water; replace in holder

L. Wash hands

M. Record temperature reading on paper

N. Make patient comfortable

O. Wash hands

P. Record temperature and report any significant elevation; indicate on record that temperature was taken rectally (R)

(NOTE: When electric thermometer is used, follow manufacturer's instructions.)

VITAL SIGNS
UNIT V

JOB SHEET #3--TAKE AXILLARY TEMPERATURE

I. Equipment needed

- A. Clean thermometer
- B. Thermometer holder
- C. Watch with second hand
- D. Paper and pen

II. Procedure

- A. Wash hands
- B. Assemble equipment and take to bedside
- C. Identify patient and explain procedure
- D. Position patient comfortably, be sure axilla is dry

  (NOTE: If axilla is wet, pat dry. Excessive rubbing will generate heat.)
- E. Place thermometer in axilla
  - 1. Leave thermometer in place for ten minutes
  - 2. Have patient hold arm tightly against chest
- F. Remove thermometer, wipe, read, and record temperature immediately on paper indicating temperature was taken in the axilla (ax)
- G. Leave patient in a comfortable position
- H. Clean thermometer and return equipment to designated area
- I. Wash hands
- J. Record temperature on form provided remembering to put (ax) above temperature; report any significant elevation

  (NOTE: When electric thermometer is used, follow manufacturer's instructions.)

VITAL SIGNS
UNIT V

JOB SHEET #4--TAKE PULSE AND RESPIRATIONS

I. Equipment needed

A. Watch with second hand

B. Pad and pencil

II. Procedure

A. Wash hands

B. Assemble equipment and take to bedside

C. Identify patient and explain procedure

D. Place patient's arm across chest

E. Place tips of first two fingers over radial artery on thumb side of wrist exerting slight pressure

(NOTE: Do not use thumb.)

F. Count for one minute with second hand of watch when pulse is felt

G. Count respirations, after pulse count and while still holding wrist

H. Record immediately on paper

I. Wash hands

J. Report pulse or respirations and any unusual observations

K. Record on form provided

VITAL SIGNS
UNIT V

JOB SHEET #5--TAKE APICAL/RADIAL PULSE

I. Equipment needed

  A. Stethoscope

  B. Watch with second hand

  C. Paper and pen

II. Procedure (requires two persons counting simultaneously)

  A. Wash hands

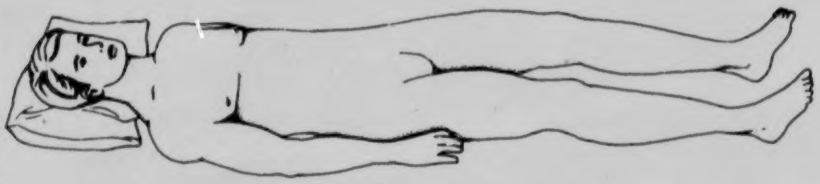
  B. Assemble equipment

  C. Identify patient and explain procedure

  D. Provide privacy

  E. Uncover left side of chest with patient in supine position

FIGURE 1



Supine Position

  F. First person

    1. Locates apex of heart by placing fingertips on patient's chest below left nipple about the fifth intercostal space

    2. Inserts ear pieces of stethoscope in ears, places bell over apical region, and listens for heart sounds

    3. Counts the beats for one full minute on signal; notes rate, rhythm, and strength of beat

  G. On signal, second person counts radial pulse

JOB SHEET #5

H. Record on paper immediately

    1. Radial pulse rate, rhythm, and strength

    2. Apical pulse rate, rhythm, and strength

    3. Pulse deficit

(NOTE: Apical pulse only is sometimes taken for certain procedures.)

I. Make patient comfortable

J. Clean and return equipment to designated area

K. Wash hands

L. Report and record procedure and observations on form provided

VITAL SIGNS
UNIT V

JOB SHEET #6--CLEAN THERMOMETERS

I. Equipment needed

  A. Two small basins

  B. Soap

  C. Cotton balls

  D. Disinfectant

  E. Thermometers

II. Safety factors

  A. Always use cool tap water

  B. Handle with care to avoid breakage

  C. Clean rectal thermometers separately from oral thermometers

III. Procedure

  A. Assemble equipment

    1. Use cool water and soap to fill one basin

    2. Fill other basin with disinfectant

  B. Wash thermometers in soapy water using cotton balls; rinse with cool water

  C. Place thermometers in disinfectant so all are covered

  (NOTE: Check for cleansing procedure in each institution.)

  D. Remove thermometers from disinfectant, rinse with cold water, and dry

  E. Store thermometer in designated place

  F. Replace equipment

  G. Wash hands

  (CAUTION: When thermometers are kept in patient's room, they should be washed after each use before storing.)

VITAL SIGNS
UNIT V

JOB SHEET #7--TAKE BLOOD PRESSURE

I. Equipment needed

A. Sphygmomanometer (Figures 1 and 2)

FIGURE 1 Aneroid

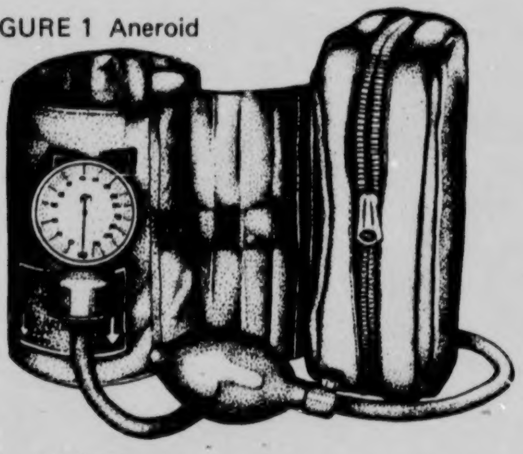
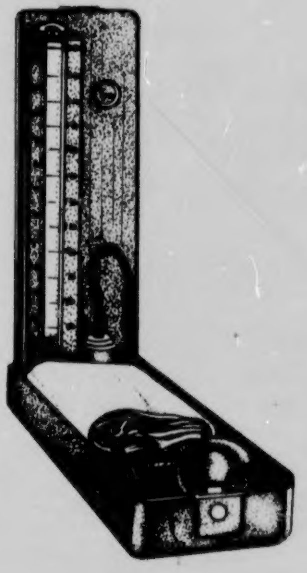


FIGURE 2

Mercury



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B. Stethoscope

C. Paper and pen

II. Procedure

A. Wash hands

B. Assemble equipment and take to bedside

C. Identify patient and explain procedure

(NOTE: Patient should be lying down or sitting with arm supported by bed, table, or arm of chair.)

D. Apply cuff snugly to arm (preferably the left) above elbow with rubber bladder of cuff over brachial artery

E. Place ear pieces of stethoscope in your ears; tighten screw on rubber bulb of sphygmomanometer

F. Locate brachial artery pulse with fingertips and place diaphragm or bell of stethoscope over pulse beat

G. Inflate cuff by squeezing bulb until pulse ceases, then inflate cuff twenty points higher

H. Open valve (thumb screw) slowly releasing air until thumping sound is heard

JOB SHEET # 7

I. Open valve (thumb screw) slowly releasing air until thumping sound is heard

J. Observe and remember the number where sound is heard; this is the systolic pressure

K. Continue to listen while releasing air gradually from cuff

L. Observe number where sound becomes muffled or dull; this is the diastolic pressure

M. Allow air to escape so pressure falls to zero

N. Wait one minute with cuff deflated, then repeat the procedures

VITAL SIGNS
UNIT V

TEST

NAME ______________________________ SCORE ______________

1. Match the terms associated with vital signs to their correct definitions.

______a. Feverish; pertaining to a fever

______b. Heart rate counted at the apex of the heart by using a stethoscope

______c. Temperature below normal body temperature

______d. Regularity or irregularity of pulses, heartbeats, or respirations

______e. Instrument used to listen to sounds produced by heart, lungs, and other internal organs

______f. Abnormally slow heart rate

______g. High blood pressure

______h. Difference between pulse counts taken simultaneously at two sites, usually radial and apical pulses

______i. Abnormally rapid heart rate

______j. Exchange of oxygen and carbon dioxide in the body

______k. Force which blood exerts against vessel wall as heart beats

______l. Instrument used to measure blood pressure

______m. Uneven intervals between pulses or heartbeats

______n. Low blood pressure

______o. Number of pulses, heartbeats, or respirations per minute

______p. Volume and strength of pulse beats

______q. Heartbeat as felt through artery walls

______r. Balance between heat produced and heat lost by the body

1. Bradycardia
2. Febrile
3. Apical pulse
4. Respiration
5. Pulse deficit
6. Stethoscope
7. Hypothermia
8. Rhythm
9. Tachycardia
10. Hypertension
11. Rate
12. Blood pressure
13. Pulse
14. Quality
15. Hypotension
16. Arrhythmia
17. Sphygmomanometer
18. Body temperature

2. Complete the chart below showing indications for specific temperature sites by placing the correct condition or temperature in the blanks provided.

Patient's Condition	Temperature Site
a. ______________	Rectal
Diarrhea	b. ______________
Difficulty in breathing	c. ______________
d. ______________	Rectal
e. ______________	Oral
Rectal or perineal surgery	f. ______________
g. ______________	Rectal
h. ______________	Rectal
i. ______________	Rectal

3. Match the temperature ranges to their correct terms in the appropriate blanks.

_____a. 37.7°C to 39.4°C (oral) (100 to 103°F)

_____b. 36.4°C (97.6°F)

_____c. 39.4° to 40.5°C (oral) (103° to 105°F)

_____d. 36.4° to 37.2°C (97.6° to 99°F)

_____e. 37.5°C (99.6°F)

_____f. Below 36.2°C (97°F)

1. Normal oral
2. Normal rectal
3. Normal axillary
4. Subnormal
5. Moderate fever
6. High fever

4. Name six factors which influence body temperature.

a. ______________________________

b. ______________________________

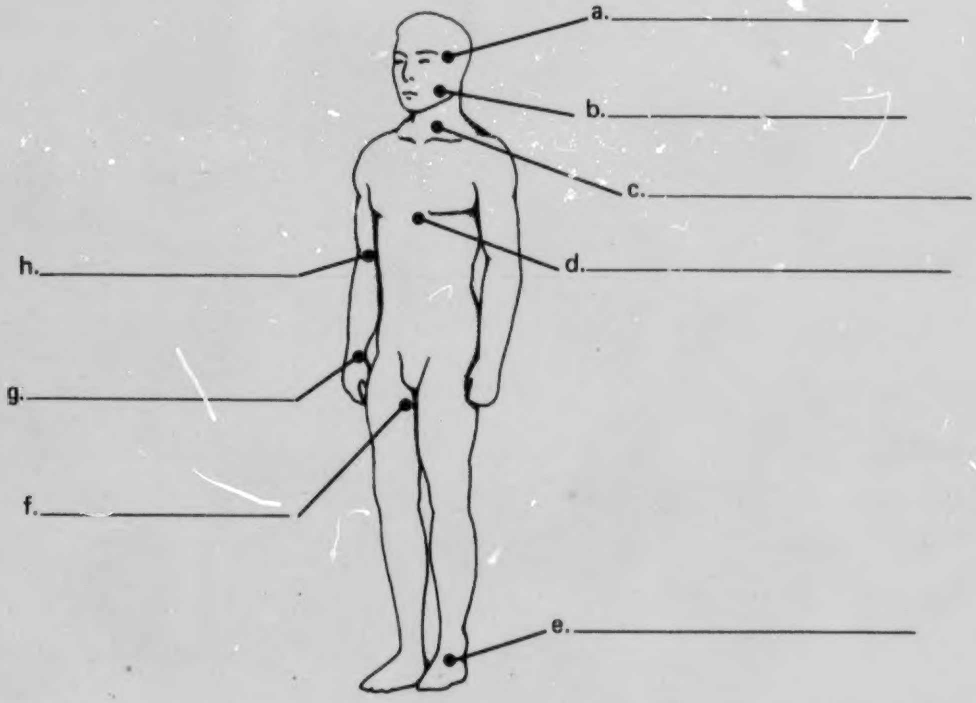
c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

5. Identify sites for taking the pulse in the drawing below.



6. Match average pulse rates to specific groups. Place the correct numbers in the appropriate blanks.

_____a. 80-120 beats per minute

_____b. 72-90 beats per minute

_____c. 60-70 beats per minute

_____d. 65-80 beats per minute

_____e. 110-130 beats per minute

1. Men
2. Women
3. Children over age seven
4. Children age one to seven
5. Infants

7. Select from the list below factors which influence heart rate and pulse rate. Place an "X" in the approprite blanks.

_____a. All drugs

_____b. Emotions

_____c. Lowered temperature

_____d. Disorders of the heart and circulatory system

_____e. Endocrine disturbances

_____f. Activity

8. Select from the list below factors affecting respiration. Place an "X" in the appropriate blanks.

______a. Exercise

______b. Pain

______c. Age

______d. Blood type

______e. Race

______f. Emotions

______g. Respiratory disease

______h. Drugs

______i. Heart disease

______j. Fever

______k. Sex

9. Match terms used to describe respiration to their correct descriptions. Place the correct numbers in the blanks provided.

______a. Bubbling or rattling sounds caused by mucus in the air passages as in bronchitis or pneumonia

______b. Temporary cessation of breathing

______c. Normal breathing

______d. Difficult or labored breathing

______e. Uneven respirations from strong to weak with intervals of apnea

______f. Breathing possible only when person sits or stands in an erect position

______g. Breathing accomplished chiefly by rib muscles

1. Eupnea
2. Dyspnea
3. Apnea
4. Orthopnea
5. Cheyne-Stokes
6. Rales
7. Costal

10. Name six factors affecting blood pressure.

a. ______________________________

b. ______________________________

c. ______________________________

d. ____

e. ____

f. ____

11. Match types of blood pressure measurements to their correct definitions. Place the correct numbers in the blanks provided.

_____ a. Difference between systolic and diastolic pressure	1. Systolic pressure
_____ b. Pressure at its peak during contraction of the heart, the systole	2. Diastolic pressure
_____ c. Pressure at its lowest when heart is relaxed, the diastole	3. Pulse pressure

12. Name sites where blood pressure may be taken.

a. ____

b. ____

c. ____

13. Read Fahrenheit thermometers.

14. Read Celsius thermometers.

15. Convert Fahrenheit and Celsius thermometer readings.

16. Chart temperature, pulse, respirations, and blood pressure.

17. Demonstrate the ability to:

    a. Take oral temperature.

    b. Take rectal temperature.

    c. Take axillary temperature.

    d. Take pulse and respirations.

    e. Take apical/radial pulse.

    f. Clean thermometers.

    g. Take blood pressure.

(NOTE: If activities 14-17 have not been accomplished prior to the test, ask your instructor when they should be completed.)

VITAL SIGNS
UNIT V

ANSWERS TO TEST

1. a. 2
   b. 3
   c. 7
   d. 8
   e. 6
   f. 1
   g. 10
   h. 5
   i. 9
   j. 4
   k. 12
   l. 17
   m. 16
   n. 15
   o. 11
   p. 14
   q. 13
   r. 18

2. a. Any of the following: Patients who have difficulty in breathing; patients with oral or nasal surgery, infection, or disease; patients with confusion, mental illness, senility, or who are unconscious; patients with extreme weakness; patients to whom oxygen is being administered

   b. Oral cavity

   c. Rectal

   d. Same as a.

   e. Any of the following: diarrhea; rectal distention from fecal material; rectal or perineal surgery

   f. Oral

   g. Same as a.

   h. Same as a.

   i. Same as a.

3. a. 5
   b. 3
   c. 6
   d. 1
   e. 2
   f. 4

4. Any six of the following:
    a. External environment
    b. Internal environment
    c. Sex
    d. Age
    e. Strong emotions
    f. Time of day
    g. Exercise and digestive processes
    h. Infection or disease
    i. Hot or cold foods
    j. Mouth breathing
    k. Smoking

5.
    a. Temporal
    b. Facial
    c. Carotid
    d. Apical
    e. Dorsalis pedis
    f. Femoral
    g. Radial
    h. Brachial

6.
    a. 4
    b. 3
    c. 1
    d. 2
    e. 5

7. b, d, e, f

8. a, b, c, f, g, h, i, j, k

9. a. 6
   b. 3
   c. 1
   d. 2
   e. 5
   f. 4
   g. 7

10. Any six of the following:
   a. Condition of the arterie and arteriole walls
   b. Rate of heartbeat
   c. Exercise
   d. Emotions
   e. Sex
   f. Hemorrhage
   g. Shock
   h. Drugs
   i. Endocrine activity
   j. Altitude
   k. Smoking
   l. Site where taken

11. a. 3
   b. 1
   c. 2

12. a. Over brachial artery on the inner surface of the elbow
   b. In the popliteal space with cuff applied above knee
   c. In lower leg over the tibial artery with cuff applied below knee

13. Evaluated to satisfaction of instructor

14. Evaluated to satisfaction of instructor
15. Evaluated to satisfaction of instructor
16. Evaluated to satisfaction of instructor
17. Evaluated to satisfaction of instructor

MEDICAL ASEPSIS
UNIT VI

UNIT OBJECTIVE

After completion of this unit, the student should be able to list ways organisms are spread, list rules for aseptic care of equipment, and match terms associated with medical asepsis to their correct definitions. The student should also be able to use proper handwashing technique and clean a patient unit. This knowledge will be evidenced by completion of assignment sheets, job sheets, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with medical asepsis to their correct definitions.
2. List ways organisms are spread.
3. Match types of medical asepsis to their correct definitions.
4. List rules for aseptic care of equipment.
5. Complete a check sheet for cleaning a patient unit.
6. Demonstrate the ability to:
    - a. Use proper handwashing technique.
    - b. Clean a patient unit.

MEDICAL ASEPSIS
UNIT VI

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

  A. Provide students with objective sheet.

  B. Provide students with information, assignment, and job sheets.

  C. Make transparency.

  D. Discuss unit and specific objectives.

  E. Discuss information and assignment sheets.

  F. Demonstrate and discuss the procedures outlined on job sheets.

  G. Discuss institutional policies for disposal of contaminated articles.

  H. Observe students in demonstrations.

  I. Discuss career opportunities in housekeeping and hospital maintenance.

  J. Show films.

  (NOTE: Suggested films are listed under Additional materials.)

  K. Make posters showing different ways of carrying out medical asepsis.

  L. Give test.

II. Instructional materials:

  A. Objective sheet

  B. Information sheet

  C. Transparency master: TM 1--Ways Organisms Are Spread

  D. Assignment Sheet #1--Complete a Check Sheet for Cleaning a Patient Unit

  E. Job sheets

    1. Job Sheet #1--Use Proper Handwashing Technique

    2. Job Sheet #2--Clean a Patient Unit

  F. Test

  G. Answers to test

III. Unit references:

A. Hornemann, Grace V. *Basic Nursing Procedures.* Albany, New York: Delmar Publishers, 1972.

B. Johnston, Dorothy F. *Total Patient Care.* St. Louis, Missouri: The C.V. Mosbey Company, 1972.

C. Leake, Mary J. *A Manual of Simple Nursing Procedures.* Philadelphia, Pennsylvania: W. B. Saunders Co., 1967.

D. Thompson, Ella M. and Rosdahl, Caroline B. *Textbook of Basic Nursing.* Philadelphia, Pennsylvania: J. B. Lippincott Co., 1973.

E. Wood, Lucile A. *Nursing Skills for Allied Health Services.* Volume One. Philadelphia, Pennsylvania: W.B. Saunders Co., 1972

IV. Additional materials:

A. Book--Ferris, Elvira B. *Microbiology for Health Careers.* Albany, New York: Delmar Publishers, 1975.

B. Films

1. "Handwashing in Patient Care." Oklahoma State Department of Health, 3400 N. Eastern, Oklahoma City, OK 73105.

2. "Nurse Combats Disease." Oklahoma State Department of Health.

3. "Hospital Sepsis." American Journal of Nursing, 10 Columbus Circle, New York, NY 10019.

   (NOTE: This film is also available from the State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074.)

C. Filmstrip--"Medical Asepsis." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

MEDICAL ASEPSIS
UNIT VI

INFORMATION SHEET

I. Terms and definitions

  A. Asepsis--Absence of microorganisms which cause infection

  B. Carrier--Person who has a specific pathogen within his/her body but does not show any symptoms and who has potential to spread the organism to others

  C. Clean--Uncontaminated; relatively free of pathogens

  (NOTE: Pathogen is any disease-producing microorganism or material.)

  D. Contact--Association between people or objects; exposure to pathogenic organisms

  E. Contagious--Communicable; readily transmitted from one person to another directly or indirectly

  F. Direct contact--Transmission of infection from one person to another

  G. Indirect contact--Transmission of a contagious disease by some means other than direct touch of the infected person

  H. Contaminate--To make unsterile or unclean by direct contact with or exposure to microorganisms

  I. Disinfection--Freeing from pathogens by physical or chemical means

  J. Infection--Invasion of the body by microorganisms

  K. Cross-infection--Infection transmitted between patients infected with different pathogens

  L. Isolation--Limiting movement and social contacts of a carrier or a person with an infection or communicable disease

  M. Sterile--Free from microorganisms

  N. Sepsis--Presence of pathogens or toxins in the blood or tissues

  O. Lesions--Any damage of tissues or organs due to pathological or traumatic injury or loss of function of a part

  P. Concurrent disinfection--Disinfection carried on daily or as often as necessary in patient care

  Q. Terminal disinfection--Care of patient's unit and belongings after the infectious period has ended or when articles are removed from the unit

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INFORMATION SHEET

II. Ways organisms are spread (Transparency 1)

   A. From equipment to patient

   B. From equipment to worker

   C. From patient to worker

   D. From worker to patient

   E. From worker to worker

   F. From patient to patient

III. Types of medical asepsis

   A. Aseptic technique--Used in all general health care

   B. Isolation technique--Used when there is infection or contagious disease

   C. Reverse or protective isolation technique--Used when patient has very low resistance, large wounds, or lesions

IV. Aseptic care of equipment

   A. Discard disposable articles in a safe manner

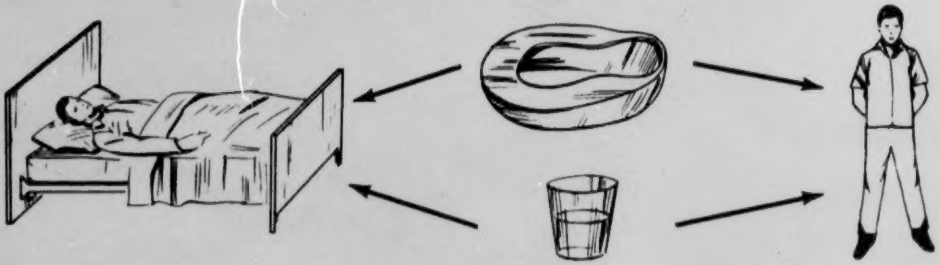
   B. Clean and disinfect washable articles thoroughly between uses

   C. Scrub and sterilize or disinfect metal instruments between uses

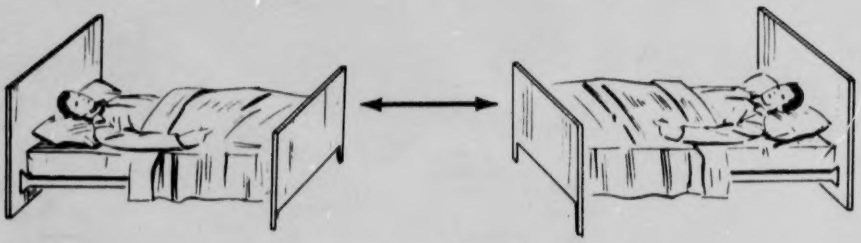
   D. Disinfect and dry rubber goods which are not disposable

   E. Use equipment carefully and safely to avoid waste and contamination

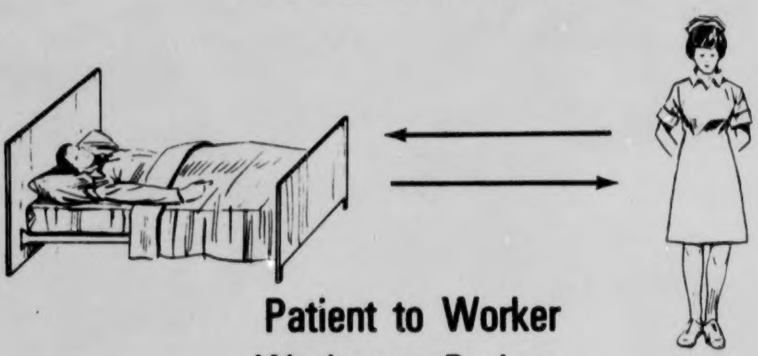
Ways Organisms Are Spread



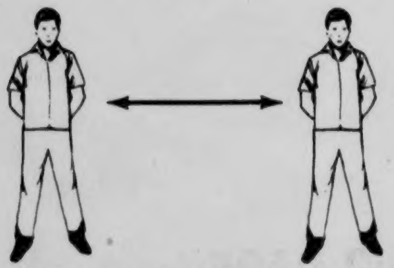
Hospital Equipment to Patient or Worker



Patient to Patient



Patient to Worker
Worker to Patient



Worker to Worker

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MEDICAL ASEPSIS
UNIT VI

ASSIGNMENT SHEET #1--COMPLETE A CHECK SHEET FOR CLEANING A PATIENT UNIT

(NOTE: After completing Job Sheet #2, use this guide to evaluate your performance of the procedure by placing checks in the appropriate boxes.)

		Performed Well	Needs Improvement
1.	Gathered all equipment needed		
2.	Removed each piece of linen separately being careful not to shake it		
3.	Held soiled articles away from uniform		
4.	Placed soiled linens in proper receptacle		
5.	Cleansed used bedside utensils in prescribed method		
6.	Began at top of bed for cleaning systematically		
7.	Cleansed and dried each area thoroughly		
8.	Cleansed and dried rubber sheet properly		
9.	Replaced all bedside utensils with clean ones		
10.	Used good body mechanics throughout procedure		
11.	Worked systematically and neatly		

MEDICAL ASEPSIS
UNIT VI

JOB SHEET #1--USE PROPER HANDWASHING TECHNIQUE

I. Equipment needed

   A. Soap

      (NOTE: It is best to use a mechanical soap dispenser if available. If bar soap is used, be sure to rinse it thoroughly before returning it to the tray.)

   B. Paper towels

   C. Running water

   D. Hand brush, if needed

   E. Waste receptacle

II. Procedure

   A. Turn on water and regulate temperature

      1. When using foot controlled faucets, turn water on when needed

      2. When using hand controlled faucets, leave water running throughout procedure

      (NOTE: Sink and surrounding areas are contaminated so DO NOT TOUCH ANY PART.)

   B. Apply soap to cover entire area of hands and wrists

   C. Add water as necessary to keep lather moist

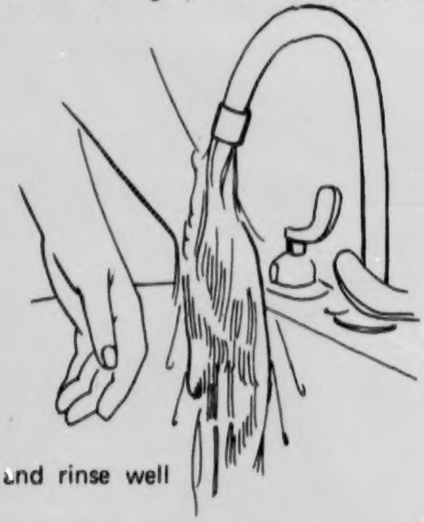
   D. Continue washing hands and use friction for thirty seconds to two minutes

   E. Use hand brush and clean nails, if needed

JOB SHEET #1

F. Rinse hands and wrists thoroughly with water flow directed from wrists down to fingers

FIGURE 1

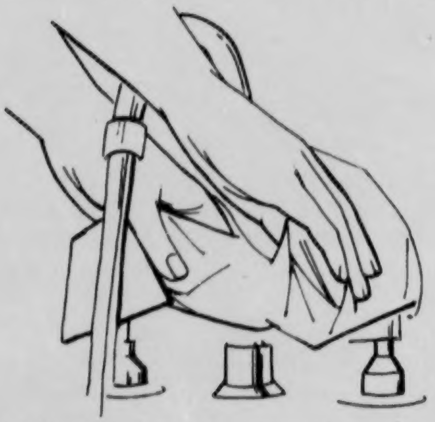


G. Soap hands again and rinse well

H. Dry hands well

I. Turn off faucets with paper towel, if hand controlled

FIGURE 2



J. Discard towel in proper waste receptacle

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MEDICAL ASEPSIS
UNIT VI

JOB SHEET #2--CLEAN A PATIENT UNIT

I. Equipment needed

  A. Receptacle for soiled linen

  B. Basin with disinfectant solution

  C. Pair of unsterile gloves

  (CAUTION: Disinfectant is usually quite strong and can be harmful to skin.)

  D. Cleaning cloths

  E. Clean linen

  F. Newspaper or plastic bag

II. Procedure

  A. Check unit for articles left by last patient

  (NOTE: Turn these in to supervisor.)

  B. Remove each piece of linen separately

  (CAUTION: Do not shake linens; hold them away from uniform.)

  C. Place used linens in receptacle for soiled linen

  D. Take bedside utensils to utility room for cleaning

  E. Place basin with disinfectant solution on bedside table

  F. Move mattress crosswise to foot of bed

  G. Put gloves on, if desired

  H. Wash and dry top and sides of mattress

  I. Raise headrest

  J. Wash and dry all exposed parts of bed

  K. Lower headrest

  L. Turn mattress, clean side down, onto upper half of bed

JOB SHEET #2

M. Wash and dry other side of mattress

N. Place rubber sheet on springs

O. Wash and dry one side of rubber sheet

P. Place rubber sheet on mattress, clean side down

Q. Wash and dry other side of rubber sheet

R. Raise foot of bed

S. Wash and dry all exposed parts of bed

T. Wash and dry bedside table and other furniture

U. Put basin of disinfectant solution on a newspaper or plastic bag spread on floor

V. Wash and dry top of bedside table

W. Return cleaning equipment to utility room and care for it properly

(NOTE: This procedure may vary with each institution.)

X. Place cleaned bedside utensils in unit

Y. Make closed bed

(NOTE: This procedure may vary with each institution.)

MEDICAL ASEPSIS
UNIT VI

TEST

NAME ________________________________ SCORE ______________

1. Match the terms associated with medical asepsis to their correct definitions by placing the appropriate numbers in the blanks provided.

______a. To make unsterile or unclean by direct contact with or exposure to microorganisms

______b. Person who has a specific pathogen within his/her body but does not show symptoms and who has potential to spread the organism to others

______c. Invasion of the body by microorganisms

______d. Free from microorganisms

______e. Transmission of a contagious disease by some means other than direct touch of the infected person

______f. Uncontaminated; relatively free of pathogens

______g. Any damage of tissues or organs due to pathological or traumatic injury or loss of function of a part

______h. Infection transmitted between patients infected with different pathogens

______i. Absence of microorganisms which cause infection

______j. Association between people or objects; exposure to pathogenic organisms

______k. Presence of pathogens or toxins in the blood or tissues

______l. Limiting movement and social contacts of a carrier or a person with an infection or communicable disease

1. Asepsis
2. Carrier
3. Clean
4. Contact
5. Indirect contact
6. Contaminate
7. Infection
8. Cross-infection
9. Isolation
10. Sterile
11. Sepsis
12. Lesions

_____ m. Freeing from pathogens by physical or chemical means

_____ n. Transmission of infection from one person to another

_____ o. Communicable; readily transmitted from one person to another directly or indirectly

_____ p. Care of patient's unit and belongings after the infectious period has ended or when articles are removed from the unit

_____ q. Disinfection carried on daily or as often as necessary in patient care

13. Disinfection
14. Direct contact
15. Terminal disinfection
16. Concurrent disinfection
17. Contagious

2. List ways organisms are spread.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

3. Match types of medical asepsis on the right to their correct definitions by placing the appropriate numbers in the blanks provided.

_____ a. Used when there is infection or contagious disease

_____ b. Used in all general health care

_____ c. Used when patient has very low resistance, large wounds, or lesions

1. Aseptic technique
2. Isolation technique
3. Reverse or protective isolation technique

4. List rules for aseptic care of equipment.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

5. Complete a check sheet for cleaning a patient unit.
6. Demonstrate the ability to:
    a. Use proper handwashing technique.
    b. Clean a patient unit.

(NOTE: If activities five and six have not been accomplished prior to the test, ask the instructor when they should be completed.)

MEDICAL ASEPSIS
UNIT VI

ANSWERS TO TEST

1. a. 6
   b. 2
   c. 7
   d. 10
   e. 5
   f. 3
   g. 12
   h. 8
   i. 1
   j. 4
   k. 11
   l. 9
   m. 13
   n. 14
   o. 17
   p. 15
   q. 16

2. a. From equipment to patient
   b. From equipment to worker
   c. From patient to worker
   d. From worker to patient
   e. From worker to worker
   f. From patient to patient

3. a. 2
   b. 1
   c. 3
4. a. Discard disposable articles in a safe manner
   b. Clean and disinfect washable articles thoroughly between uses
   c. Scrub and sterilize or disinfect metal instruments between uses
   d. Disinfect and dry rubber goods which are not disposable
   e. Use equipment carefully and safely to avoid waste and contamination
5. Performance skills evaluated to the satisfaction of the instructor
6. Performance skills evaluated to the satisfaction of the instructor

SURGICAL ASEPSIS
UNIT VII

UNIT OBJECTIVE

After completion of this unit, the student should be able to name methods used for disinfection and/or sterilization. The student should also be able to use surgical equipment correctly and put on sterile gloves. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with surgical asepsis to their correct definitions.
2. Discuss reasons for maintaining aseptic technique.
3. Name methods of disinfection and/or sterilization.
4. Identify instruments used for dressing changes.
5. Name reasons for applying dressings.
6. Demonstrate the ability to:
    a. Use surgical supplies correctly.
    b. Put on sterile gloves.

SURGICAL ASEPSIS
UNIT VII

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information sheet.

   F. Discuss surgical aseptic technique in your institutions.

   G. Invite resource persons from the surgery, housekeeping, or epidemiology departments in a hospital to speak on preventing the spread of disease or career opportunities in those fields.

   H. Demonstrate and discuss procedures outlined in the job sheets.

   I. Provide materials needed to complete job sheets.

   J. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Transparency masters

      1. TM 1--Some Instruments Used For Dressing Changes

      2. TM 2--Some Instruments Used For Dressing Changes (Continued)

      3. TM 3--Some Instruments Used For Dressing Changes (Continued)

   D. Job Sheets

      1. Job Sheet #1--Use Surgical Supplies Correctly

      2. Job Sheet #2--Put On Sterile Gloves

   E. Test

   F. Answers to test

III. Unit references:

A. Rapier, Dorothy L. et al. *Practical Nursing.* St. Louis, Missouri: The C. V. Mosby Company, 1970.

B. Fuerst, Elinor V. et al. *Fundamentals of Nursing.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1974.

C. Rasmussen, Sandra. *Foundations of Practical and Vocational Nursing.* New York: The Macmillan Company, 1967.

D. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1975.

E. Rogers, Helen. *Nursing II: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1975.

F. Sutton, Audrey L. *Bedside Nursing Techniques in Medicine and Surgery.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1969.

G. Thompson Ella M. and Rosdahl, Caroline B. *Textbook of Basic Nursing.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1969.

H. Ohio Trade and Industrial Education Service. *Nursing Procedures for the Practical Nurse.* Columbus, Ohio: Division of Vocational Education State Department of Education, 1969.

IV. Additional references:

A. Filmstrips

1. "Infection Control." Concept Media, P.O. Box 19542, Irvine, CA 92714

2. "Sterile Technique and Dressing Change." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642

B. Book--Ethicon Inc. *Nursing of the Patient in the O.R.,* 1973. U. S. Highway 22, Somerville, NJ 08876.

SURGICAL ASEPSIS
UNIT VII

INFORMATION SHEET

I. Terms and definitions

A. Medical asepsis--Procedures used to protect patient and environment from the transmission of disease-producing organisms from one person to another

B. Surgical asepsis--Procedures used to keep objects or areas sterile or completely free of microorganisms

C. Clean (as applied to medical asepsis)--Gross contamination and many microorganisms have been removed

D. Sterile (as applied to surgical technique)--Free of microorganisms and spores

E. Autoclave--Apparatus for sterilizing objects using steam under pressure

F. Forceps--Surgical instrument with two opposing blades or limbs controlled by handles

G. Sterilization--Process of destroying microorganisms on a substance by exposure to chemical or physical agents

H. Disinfection--Destruction of infection-producing organisms

(NOTE: Heat and certain other physical agents, such as live steam, can be termed disinfectants. In common usage, however, disinfection usually refers to the use of chemical solutions to destroy pathogens. Sterilization usually refers to the procedure of boiling or autoclaving materials.)

II. Reasons for maintaining aseptic technique

A. Failure to be exacting and meticulous is not readily detectable

(NOTE: Aseptic techniques are only as good as the most careless person performing them. Breaks in technique endanger other health care personnel as well as the patient.)

B. Due to widespread and indiscriminate use of antibiotics, many strains of bacteria resistant to antibiotics are developing

C. Some strains of microorganisms can survive for months or years in dust and bedding, especially in blankets or mattresses

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INFORMATION SHEET

D. Some disease-producing organisms can be present in the nasal passages or on the skin of patients and health care personnel without causing any clinical symptoms

E. Disease-producing organisms can be carried from one patient to another on improperly cleaned utensils, such as thermometers and emesis basins

F. Persons most susceptible to bacterial infection are newborn infants, debilitated patients, and patients who have breaks in the skin, such as surgical wounds or needle pricks from administration of intravenous fluids

G. It is the health team's responsibility to maintain its own aseptic technique and to stress the importance of aseptic technique to other hospital personnel, patients, and visitors

III. Methods of disinfection and/or sterilization

A. Boiling

(NOTE: This method destroys most organisms, but not spores, in ten minutes.)

B. Autoclaving

(NOTE: Exposure to steam for fifteen minutes at 7.2 kg pressure and 150°C [eighteen lbs pressure and 327.6°F] kills all organisms, including spores.)

C. Chemical disinfection

(NOTE: Time varies with disinfectant used.)

D. Dry heat

(NOTE: Hot air sterilization or gas sterilization involves the use of equipment similar to an ordinary baking oven.)

IV. Instruments used for dressing changes (Transparencies 1, 2, and 3)

A. Bandage scissors

B. Straight surgical scissors

C. Curved surgical scissors

D. Transfer forceps

E. Plain thumb forceps

INFORMATION SHEET

  F. Rattooth thumb forceps

  G. Groove director

  H. Probe

  I. Curved hemostat

  J. Straight hemostat

  K. Scalpel

V. Reasons for applying dressings

  A. To prevent contamination

  B. To protect wound from further injury

  C. To apply medication

  D. To apply pressure to keep edges of wound together

  E. To absorb drainage

  F. To promote healing

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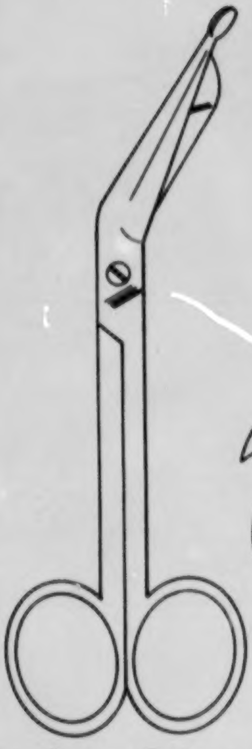
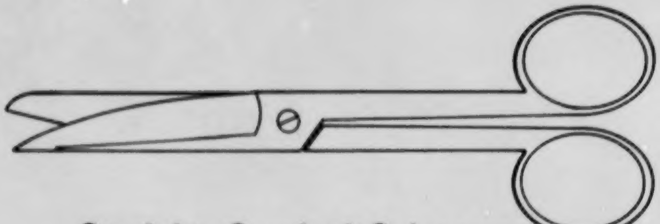
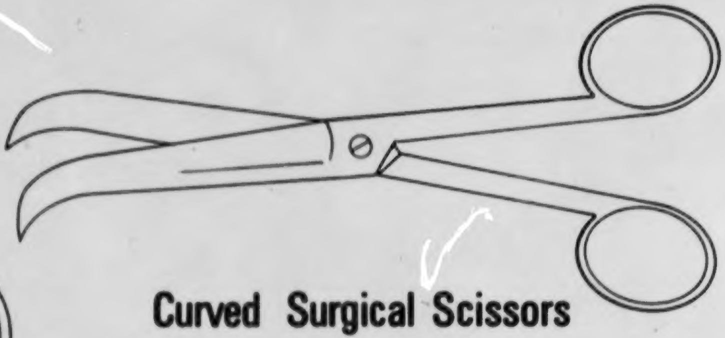
Some Instruments Used for Dressing Changes



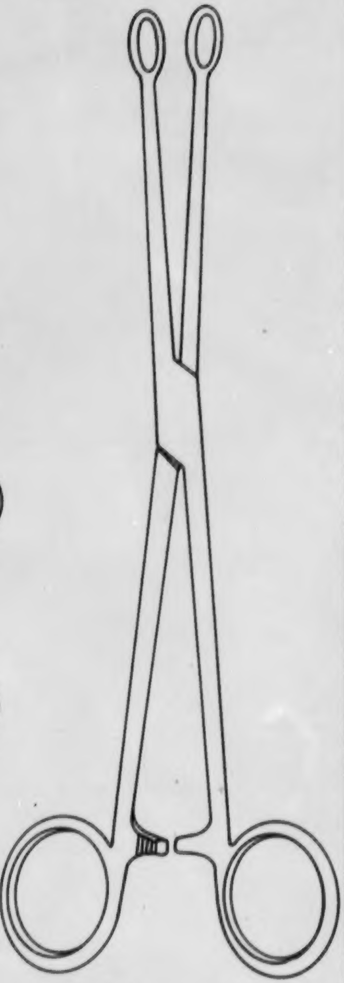
Bandage Scissors



Straight Surgical Scissors



Curved Surgical Scissors



Transfer Forceps

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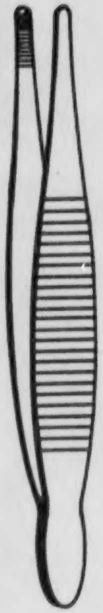
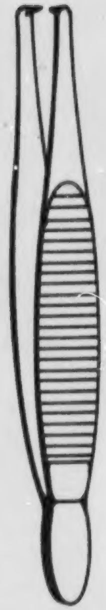
Some Instruments Used for Dressing Changes

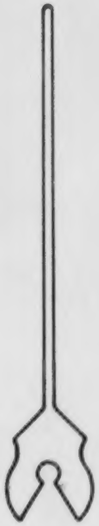
(Continued)



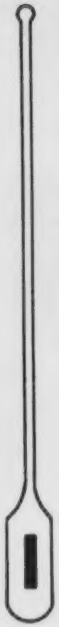
Plain
Thumb Forceps



Rattooth
Thumb Forceps



Groove Director



Probe

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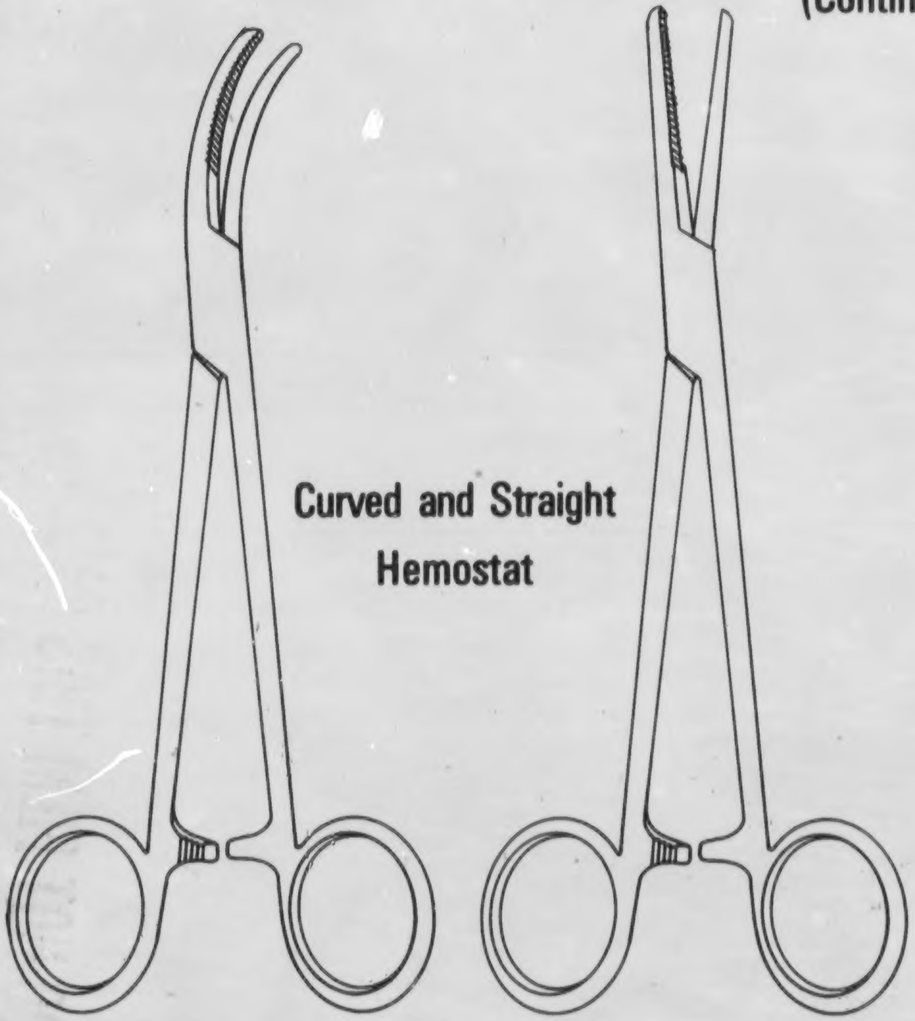
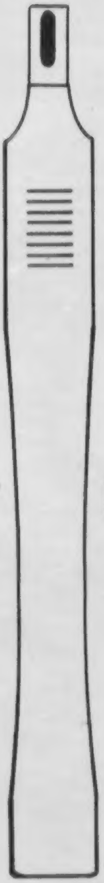
Some Instruments Used for Dressing Changes

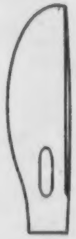
(Continued)



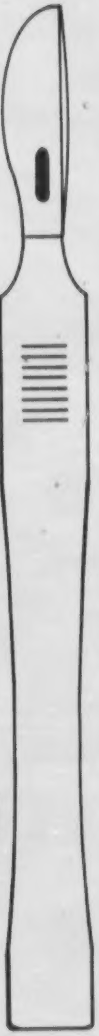
Curved and Straight Hemostat



Handle



Blade



Scalpel Assembled

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SURGICAL ASEPSIS
UNIT VII

JOB SHEET #1--USE SURGICAL SUPPLIES CORRECTLY

I. Equipment

   A. Transfer forceps

      (NOTE: Transfer forceps may also be called handling forceps, lifting forceps or pick-up forceps.)

   B. Forceps container with disinfectant

   C. Containers of sterile supplies

      1. Sterile towels and/or tray covers

      2. 4 x 4s

      3. Cotton balls

      4. Applicators or swabs

      5. Instruments

II. Procedure for using transfer forceps

   A. Wash hands

   B. Remove transfer forceps from container

      (NOTE: Keep only one set of forceps in each container.)

      1. Withdraw forceps vertically, taking care not to touch sides of container

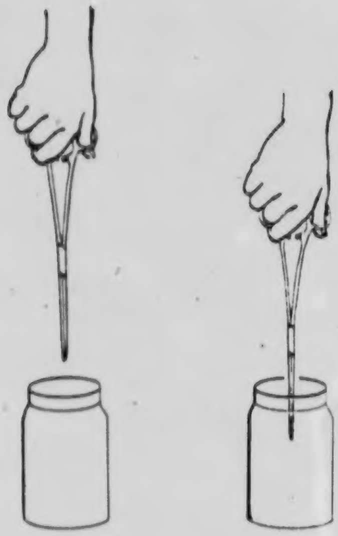
         (NOTE: Remember only the part of the transfer forceps covered by solution in the container is sterile.)

      2. Hold forceps with tip down to prevent disinfectant from running back and forth over both sterile and unsterile portions of the forceps

         (NOTE: Always keep forceps and container in front of you; never reach back to obtain forceps. See Figure 1 on the following page.)

JOB SHEET #1

FIGURE 1



C. Return forceps to container

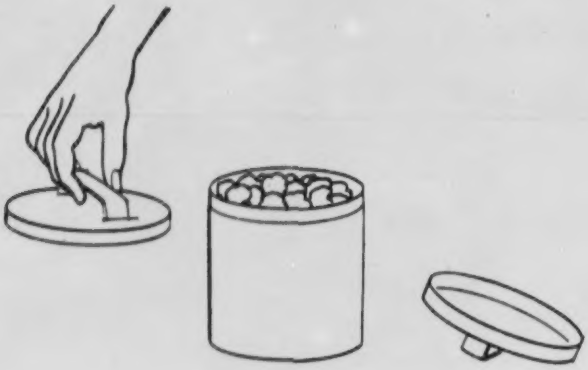
1. Take care not to touch the outside or rim of container
2. Make sure tips are together whenever forceps are lifted from or returned to container

III. Procedure for removing the cover from a container of sterile supplies

A. Hold cover with inner surface down if cover is held

B. Place outer surface down to prevent contaminating the inside if cover is laid down (Figure 2)

FIGURE 2



JOB SHEET #1

IV. Procedure for preparing a sterile field on a tray or table

(NOTE: Remember the 2.54 cm (1 in) outer edge of a prepared field is considered contaminated; keep all articles inside this margin.)

A. Lift cover from container of towels

B. Remove one towel with transfer forceps

C. Replace cover

D. Transfer towel to free hand

E. Replace transfer forceps

F. Open towel, touching only the side which will touch the tray or table surface

G. Lay towel on tray or table

H. **Do not reach across the sterile field or brush uniform on edge of sterile areas**

V. Procedure for handling 4 x 4's, cotton balls, applicators

A. Lift cover from container

B. Remove desired number of articles with transfer forceps (Figures 3 and 4)

FIGURE 3

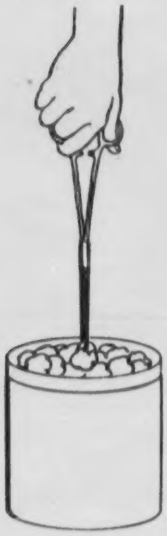
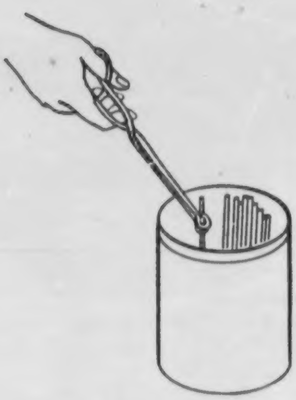


FIGURE 4



JOB SHEET #1

C. Place articles along one side of the sterile surface

(NOTE: DROP sterile articles onto sterile field; do not let forceps touch the field.)

D. Place along other side of sterile field one or more 4 x 4's on which to lay instruments

(NOTE: In some cases, a sterile basin is placed on the tray to receive instruments from the disinfectant solution.)

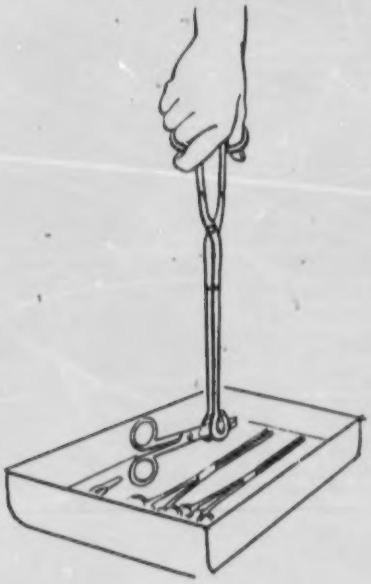
E. Replace cover on container

VI. Procedure for handling instruments (Figure 5)

A. Remove cover from instrument container

B. Lift out desired instrument with transfer forceps

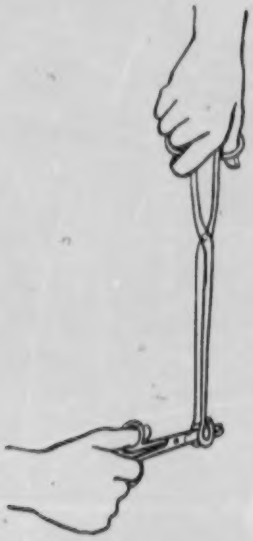
FIGURE 5



JOB SHEET #1

C. Place instrument on the 4 x 4 or in the basin provided, or hand instrument to another person (Figure 6)

FIGURE 6



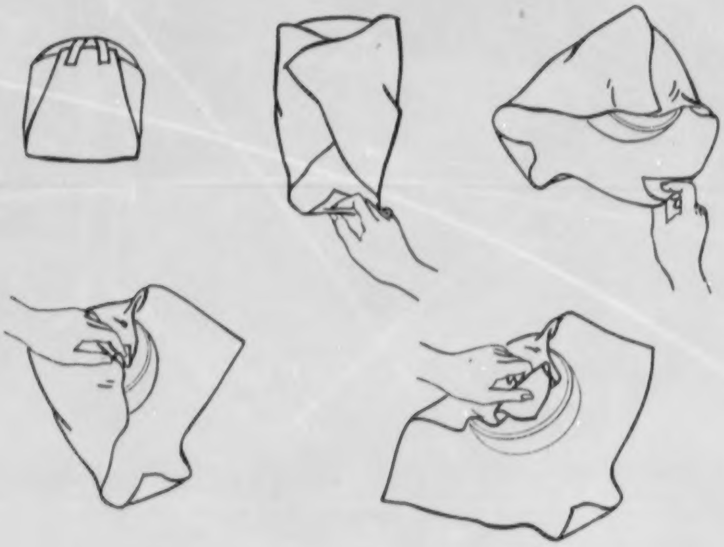
VII. Procedure for opening a large pack

A. Place large packs to be opened on table

B. Loosen fasteners

C. Fold back one flap at a time, grasping the wrapper from outside so fingers never touch the inside (Figure 7)

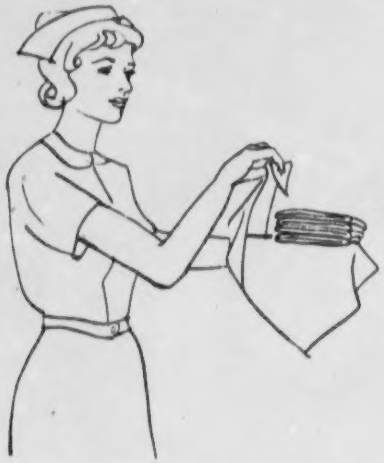
FIGURE 7



JOB SHEET #1

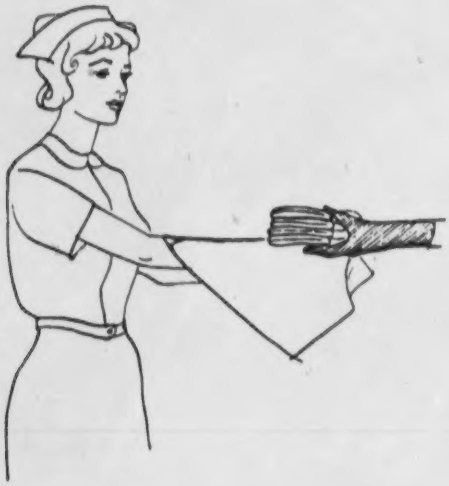
D. Hold pack so that last flap opened is toward you (Figure 8)

FIGURE 8



E. Use articles from pack as needed, or transfer to a sterile tray with transfer forceps or sterile gloves (Figure 9)

FIGURE 9



VIII. Procedure for opening a small pack

A. Loosen fasteners

B. Hold pack in one hand

C. Open flaps one at a time with other hand

JOB SHEET #1

D. Hold pack so that last flap opened is toward you

E. Hand article to someone wearing gloves, or transfer with transfer forceps

IX. Procedure for adding solutions to a tray

A. Place container on tray for receiving the solution using transfer

B. Remove cap from container of solution

C. Pour solution gently without splashing it

(NOTE: Remember that liquid on the sterile field makes the field unsterile.)

D. Replace cap on solution container

X. Procedure for care of a prepared tray

A. Cover tray with another sterile towel, being careful not to touch underside of towel which will touch tray

(NOTE: Trays should not be prepared too long before use due to the danger of contamination.)

B. Leave tray covered until needed or take to patient's unit for use

(NOTE: Many health care facilities use commercially prepared set-ups. Materials should be used according to manufacturer's recommendations.)

SURGICAL ASEPSIS
UNIT VII

JOB SHEET #2--PUT ON STERILE GLOVES

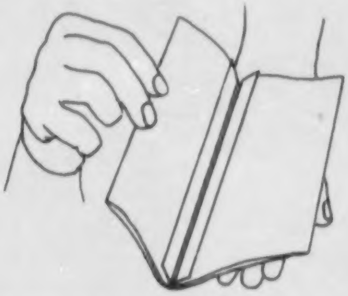
I. Equipment

- A. Package of sterile gloves
- B. Soap
- C. Brush
- D. Paper towels

II. Procedure

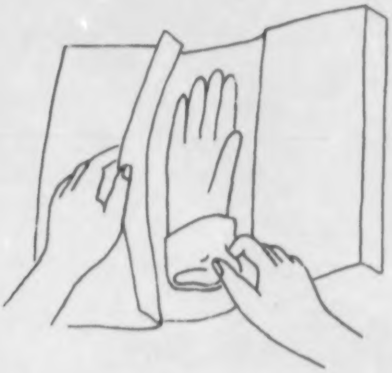
- A. Wash hands
- B. Open sterile glove wrapper, touching only the outside (Figure 1)

FIGURE 1



- C. Scrub hands for two minutes using brush, soap, and water as needed
- D. Rinse and dry hands
- E. Remove one glove from wrapper by grasping cuff on the fold (Figure 2)

FIGURE 2

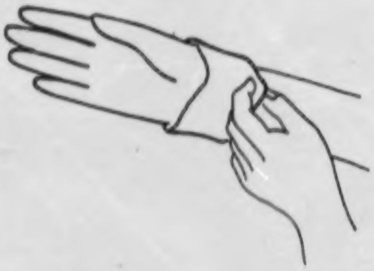


JOB SHEET #2

F. Put glove on by pulling on folded edge of cuff (Figure 3)

(NOTE: Do not touch outside of glove with figures of the ungloved hand.)

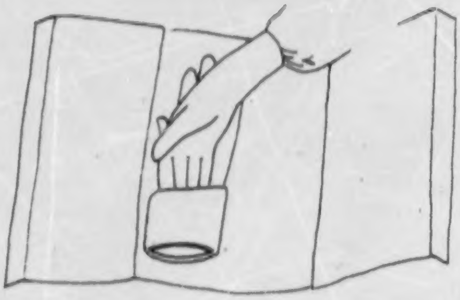
FIGURE 3



G. Remove second glove from wrapper by slipping gloved fingers inside the folded cuff (Figure 4)

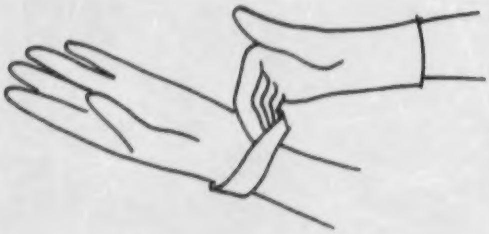
(NOTE: Do not touch gloved hand to outside of wrapper which is unsterile.)

FIGURE 4



H. Pull second glove on, taking care not to touch outside of gloved fingers to ungloved hand (Figure 5)

FIGURE 5



I. Adjust fingers as necessary

SURGICAL ASEPSIS
UNIT VII

TEST

NAME ________________________________ SCORE ________________

1. Match the terms associated with surgical asepsis to their correct definitions. Place the correct numbers in the blanks provided.

______a. Surgical instrument with two opposing blades or limbs controlled by handles

______b. Apparatus for sterilizing objects using steam under pressure

______c. Free of microorganisms and spores

______d. Gross contamination and many microorganisms have been removed

______e. Procedures used to keep objects or areas sterile or completely free of microorganisms

______f. Procedures used to protect patient and environment from the transmission of disease-producing organisms from one person to another

______g. Destruction of infection-producing organisms

______h. Process of destroying microorganisms on a substance by exposure to chemical or physical agents

1. Clean
2. Sterile
3. Surgical asepsis
4. Disinfection
5. Medical asepsis
6. Autoclave
7. Sterilization
8. Forceps

2. Discuss reasons for maintaining aseptic techniques.

3. Name methods of disinfection and/or sterilization.

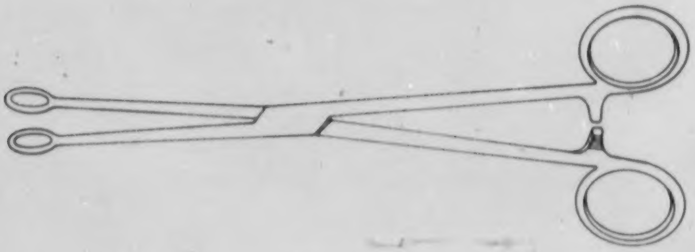
   a.

   b.

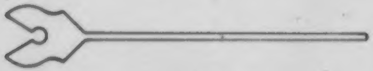
   c.

   d.

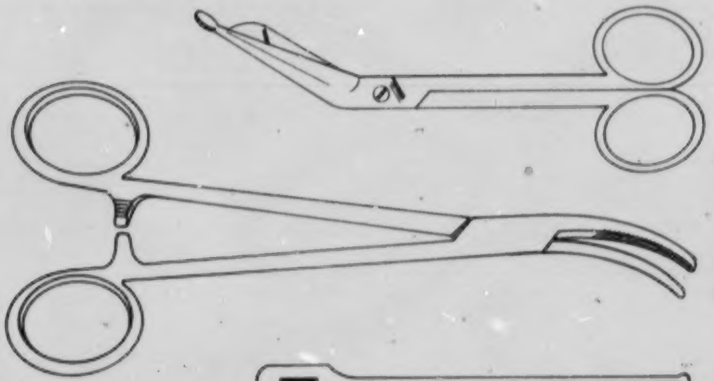
4. Identify instruments used for dressing changes shown below. Write the correct names in the blanks provided.



a. ____________________

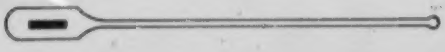


b. ____________________

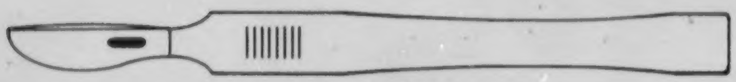


c. ____________________

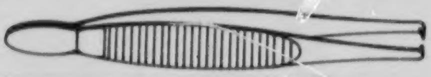
d. ____________________



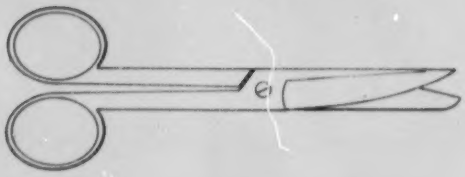
e. ____________________



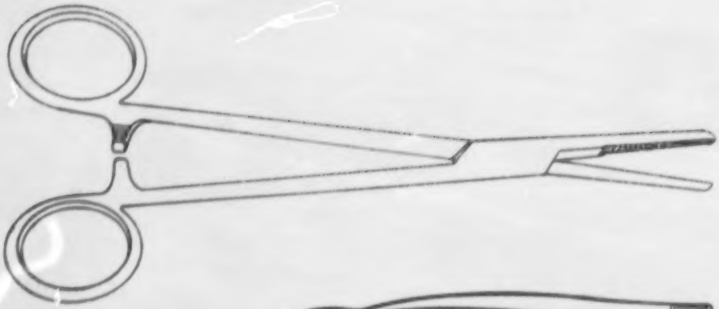
f. ____________________



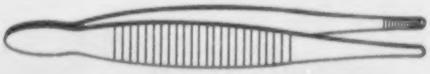
g. ____________________



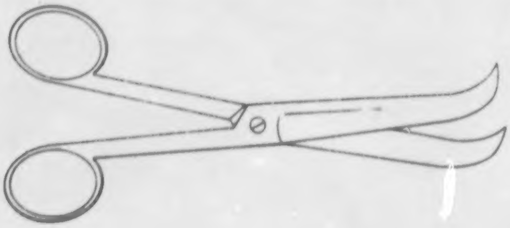
h. ____________________



i. ____________________



j. ____________________



k. ____________________

5. Name three reasons for applying dressings.

   a. ____

   b. ____

   c. ____

6. Demonstrate the ability to:

   a. Use surgical supplies correctly.

   b. Put on sterile gloves.

   (NOTE: If activity 6 has not been accomplished prior the the test, ask the instructor when it should be completed.)

SURGICAL ASEPSIS
UNIT VII

ANSWERS TO TEST

1. a. 8
   b. 6
   c. 2
   d. 1
   e. 3
   f. 5
   g. 4
   h. 7

2. Discussion should include:

   a. Failure to be exacting and meticulous is not readily detectable

   b. Due to widespread and indiscriminate use of antibiotics, many strains of bacteria resistant to antibiotics are developing

   c. Some strains of microorganisms can survive for months or years in dust and bedding, especially in blankets or mattresses

   d. Some disease-producing organisms can be present in the nasal passages or on the skin of patients and health care personnel without causing any clinical symptoms

   e. Disease-producing organisms can be carried from one patient to another on improperly cleaned utensils, such as thermometers and emesis basins

   f. Persons most susceptible to bacterial infection are newborn infants, debilitated patients, and patients who have breaks in the skin, such as surgical wounds or needle pricks for the administration of intravenous fluids

   g. It is the health team's responsibility to maintain its own aseptic technique and to stress the importance of aseptic technique to other hospital personnel, patients, and visitors

3. a. Boiling

   b. Autoclaving

   c. Chemical disinfection

   d. Dry heat

4. a. Transfer forceps

   b. Groove director

   c. Bandage scissors

- d. Curved hemostat
- e. Probe
- f. Scalpel
- g. Rattooth thumb forceps
- h. Straight surgical scissors
- i. Straight hemostat
- j. Plain thumb forceps
- k. Curved surgical scissors

5. Any three of the following:
   - a. To prevent contamination
   - b. To protect wound from further injury
   - c. To apply medication
   - d. To apply pressure to keep edges of wound together
   - e. To absorb drainage
   - f. To promote healing
6. Performance skills evaluated to satisfaction of instructor

ISOLATION TECHNIQUE
UNIT VIII

UNIT OBJECTIVE

After completion of this unit, the student should be able to name ways to prevent the spread of disease. The student should also be able to demonstrate the ability to carry out double bagging technique, use proper isolation techniques, and put on and remove a mask and gown. This knowledge will be evidenced through completion of job sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with isolation technique to their correct definitions.
2. Match ways diseases are spread to their correct definitions.
3. Name ways to prevent the spread of disease.
4. Select from a list purposes of isolation technique in a health facility.
5. Match diseases affecting specific systems to the correct isolation techniques.
6. Name general principles of isolation.
7. Discuss health assistant's responsibilities to meet emotional needs of an isolated patient.
8. Demonstrate the ability to:
    a. Carry out double bagging technique.
    b. Use proper isolation techniques.
    c. Put on and remove mask and gown.

ISOLATION TECHNIQUE
UNIT VIII

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and job sheets.

   C. Make transparencies.

   D. Discuss unit and specific objectives.

   E. Discuss information sheet.

   F. Demonstrate and discuss the procedures outlined on job sheets.

   G. Demonstrate and discuss isolation procedures using role-playing.

   H. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Job sheets

      1. Job Sheet #1--Carry Out Double Bagging Technique

      2. Job Sheet #2--Use Proper Isolation Techniques

      3. Job Sheet #3--Put On And Remove Mask And Gown

   D. Test

   E. Answers to test

III. Unit references:

   A. Roger, Helen. *Nursing II: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1975.

   B. Sutton, Audrey L. *Bedside Nursing Techniques in Medicine and Surgery.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1969.

   C. Thompson, Ella M., and Rosdahl, Caroline B. *Textbook of Basic Nursing.* Philadelphia, Pennsylvania: J.B. Lippincott Company, 1973.

IV. Filmstrips:

A. "Isolation Technique." Trainex Corporation, P.O. Box 116, Garden Grove, CA 92642.

B. "Infection Control Series I: Programs 1 to 5." Concept Media, P.O. Box 19542, Irvine, CA 92714.

C. "Infection Control Series II: Program 5 to 8." Concept Media.

ISOLATION TECHNIQUE
UNIT VIII

INFORMATION SHEET

I. Terms and definitions

A. Contaminated--Exposed to pathogenic organisms

(NOTE: Contaminated articles may appear clean but are still very infective after contact with a diseased person.)

B. Isolation--Separation of persons having an infection or contagious disease from others; separation of contaminated articles

C. Isolation technique--Health care procedures to prevent spread of infection or contagious disease from one person to another

D. Disinfection--Killing of pathogenic organisms by chemical or physical means; commonly used on inanimate objects

E. Dysentery--Inflammation of the intestine, particularly the colon; due to varied causes; characterized by abdominal pain and diarrhea with blood or mucus

F. Infectious hepatitis--Acute, infectious, inflammatory disease of the liver caused by a virus; transmitted orally; may be epidemic

G. Serum hepatitis--Form of viral hepatitis transmitted by parenteral injection of human blood or blood products contaminated with hepatitis virus

H. Excreta--Waste material eliminated by the body, including feces, urine, and perspiration

I. Impetigo--Acute, infectious, inflammatory skin disease caused by streptococci or staphylococci; characterized by vesicles and bullae which rupture and develop crust

J. Scabies--Contagious skin disorder caused by a minute insect which burrows under the skin; causes intense itching chiefly at night

K. Necrosis--Pathological death of a cell or group of cells in contact with living tissue

L. Gangrene--Necrosis of a part due to failure of blood supply, disease, or injury

M. Gas gangrene--Form of gangrene occurring in massive wounds; caused by anaerobic bacilli; characterized by high fever, offensive purulent discharge, and presence of gas bubbles in the tissues

The Oklahoma State Department of Vocational and Technical Education does not discriminate on the basis of race, creed, color, national origin, sex, age, veteran status, or qualified handicap.

INFORMATION SHEET

N. Concurrent disinfection--Disinfection carried on daily or as often as necessary in patient care

O. Terminal disinfection--Care of patient's unit and belongings after infectious period has ended or when articles are removed from the unit

P. Reverse isolation technique--Modified surgical asepsis to prevent introduction of disease-producing organisms into a patient's unit

(NOTE: Reverse isolation technique is used mainly to protect patients with extensive burns or wounds and for patients with lowered resistance. All persons must do surgical scrub and wear sterile mask, gown, cap, and gloves, books, magazines, and newspapers are sterilized for one hour at 150°C [300°F].)

Q. Clean--Not contaminated with pathogens

R. Shroud--Cloth used to wrap a corpse

II. Ways diseases are spread

A. Contact--Disease is spread by actually touching the infected person or articles he/she has handled

B. Vehicle--Disease is spread by contaminated food, water, or medication, or by direct transfer of blood from an infected person

C. Airborne--Disease is spread through dust or droplet particles in the air

D. Vector--Disease is carried via an insect, such as a mosquito or tick, from an animal or person to another person

III. Ways to prevent the spread of disease

A. Isolate patient and everything that is contacted

B. Destroy organisms that leave patient's body

C. Take protective measures when caring for infectious patient

IV. Purposes of isolation technique in a health facility

A. Removes patient from source of infection

B. Protects patient from contracting another disease or infection

C. Protects health care personnel and other patients

D. Provides safe disposal or disinfection of equipment

INFORMATION SHEET

V. Isolation techniques for specific systems

(NOTE: Isolation procedures and policies vary among institutions The following are some general rules of good practice.)

A. Diseases of skin and mucous membranes--Full isolation technique using gown, mask, and gloves must be carried out and all disposable items burned

Examples: Gonorrhea, impetigo, staphylococcal infection, scabies, gas gangrene

B. Diseases of respiratory system--Masks and gowns must be worn and all oral and nasal discharges must be disposed of by burning

Examples: Tuberculosis, measles, diphtheria, mumps, types of pneumonia

C. Diseases of gastrointestinal system--Gowns must be worn and masks if patient is vomiting or coughing; excreta may have to be disinfected before disposal

Examples: Typhoid, dysenteries, infectious hepatitis, contagious diarrhea in children

D. Diseases of blood and serum--Syringes and needles must be disposed of properly and any dressing with drainage from wounds should be burned

Examples: Malaria, syphilis, serum hepatitis

VI. General principles of isolation

A. Each health worker is responsible for learning about the type of isolation technique used in that facility

B. Equipment should be kept to a minimum

C. Anything taken from unit must be disinfected, sterilized, or burned

D. THOROUGH AND FREQUENT HANDWASHING IS THE MOST ESSENTIAL PROCEDURE

VII. Health assistant's responsibilities to meet emotional needs of an isolated patient

A. Explain isolation to patient and family

1. Reasons for isolation
2. Methods through which isolation is carried out
3. Articles permitted for patient's use

INFORMATION SHEET

4. Disinfection for articles on removal

5. Activities family can do to aid in maintaining isolation technique

B. Provide reassurance and emotional support

C. Check frequently to keep patient from feeling neglected or lonely

D. Provide diversions since patient will be alone much of the time

(NOTE: With a little extra effort, radio, TV, and reading material can be provided.)

ISOLATION TECHNIQUE
UNIT VIII

JOB SHEET #1--CARRY OUT DOUBLE BAGGING TECHNIQUE

I. Equipment

- A. Plastic bags inside isolation room
- B. Plastic bags, usually large and red
- C. Secure fastener, tapes or ties
- D. Tape or labels
- E. Marking pens

II. Procedure

(NOTE: Ask someone to help you. You stay outside the unit to remain clean; the second person works inside the unit.)

- A. Hold wide open a clean, cuffed bag at entrance to unit
- B. Have person inside unit place bagged items from the unit inside clean bag
- C. Fold over top of bag and fasten it
- D. Label bags to indicate what contaminated articles are inside

  (NOTE: Label contents in several places with letters large enough to be read easily.)
- E. Take bags to proper disposal or unit area

ISOLATION TECHNIQUE
UNIT VIII

JOB SHEET #2--USE PROPER ISOLATION TECHNIQUES

I. Equipment

- A. Bags for double bagging and labels
- B. Receptacle for soiled linen
- C. Bedside equipment: bedpan, urinal, kidney basin, soap dish, drinking glass, water pitcher
- D. Masks and gowns
- E. Linens for unit

II. Procedures

- A. Linen
    1. Carry only needed linen into unit
    2. Keep receptacle for soiled linen in unit
    3. Put linens in double bags and label when removing linens from unit

       (NOTE: Most linens can be disinfected by usual laundering process but if contaminated by spore-forming organisms, they should be sterilized.)
    4. Dispose of disposable linens with other disposables in bags
- B. Food utensils
    1. Discard disposable settings
    2. Wash, double bag, and label all others when taken from unit
- C. Bedpans, urinals, and excreta--Empty immediately and disinfect with solution used in that particular facility
- D. Other body discharges
    1. Bag in double bags discharges on tissue wipes from eyes, nose and mouth; double bag contaminated dressings
    2. Dispose of immediately according to facility's method

JOB SHEET #2

E. Sending specimens to laboratory

1. Keep outside of specimen container clean or transfer to clean container

2. Label and bag specimens outside unit before taking to lab

F. Taking vital signs

1. Leave equipment needed inside unit; if necessary to remove, disinfect before removing

2. Use a wall clock with second hand, if possible

3. Protect your watch by placing it on a clean paper towel or in plastic bag

G. Transporting patients to other areas of hospital

1. Have patient wear clean gown and mask

2. Drape wheelchair or stretcher with a clean blanket

3. Wrap patient in blanket, leaving face uncovered

4. Tell department what type of infection the patient has so proper precautions can be taken

H. Care of body after death

1. Care for body as usual, then wrap in shroud

2. Drape stretcher with clean shroud

3. Transfer body to stretcher

   (NOTE: Outside the unit a clean person wraps the body, touching only outside of clean shroud.)

4. Label so the pathologist or mortician will know what kind of isolation was carried out

5. Transport

   (NOTE: Each institution has its own procedure to carry out in case of death.)

ISOLATION TECHNIQUE
UNIT VIII

JOB SHEET #3--PUT ON AND REMOVE MASK AND GOWN

I. Equipment

  A. Mask

  B. Gown

  C. Head covering

II. Procedure to put on mask and gown

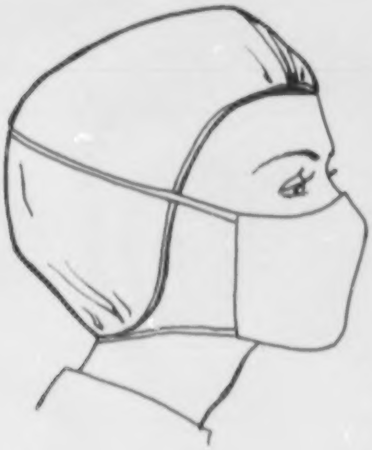
  A. Wash hands

  B. Put on head covering

  C. Position mask over both nose and mouth (Figure 1)

  (CAUTION: Check mask for fit and comfort. Face and mask must not be touched again after entering the isolation unit until you have washed your hands. Mask must be changed frequently according to type. If mask becomes wet, DISCARD.)

FIGURE 1



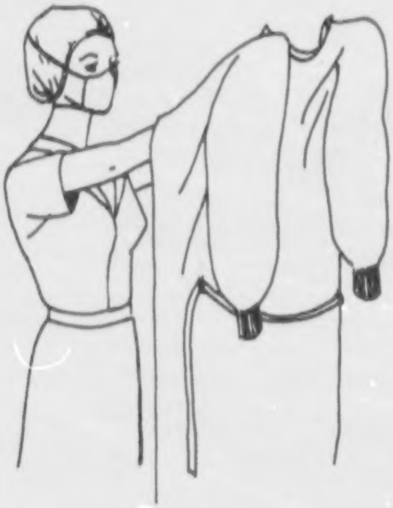
  D. Put on gown

    1. Pick up folded gown by the neckband and shake slightly to straighten

JOB SHEET #3

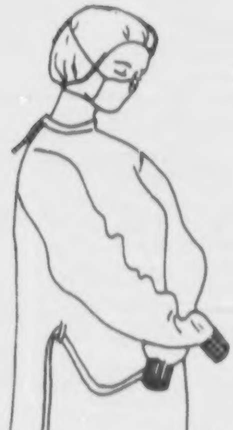
2. Slide gown onto arms by holding the arms forward and slightly above shoulder level (Figure 2)

FIGURE 2



3. Pull one sleeve on, using opposite hand inside second sleeve (Figure 3)

FIGURE 3



4. Pull on second sleeve

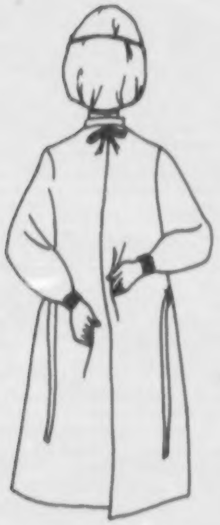
(CAUTION: Do not touch outside of gown with hands. If by accident you do touch outside of gown, wash your hands before fastening ties.)

JOB SHEET #3

5. Fasten gown at neck

6. Grasp gown at waistline and lap the right side over the left side (Figure 4)

FIGURE 4



7. Hold overlapped edge with right hand

8. Grasp left belt and pull it around to the back

9. Pick up right belt, draw into place, and tie belt

   (CAUTION: Your hands are now contaminated. Gown below shoulder level is always considered to be contaminated.)

III. Procedure to remove gown and mask

   A. Untie belt

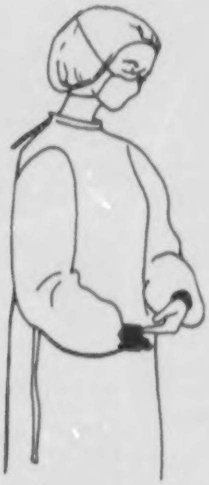
   B. Wash and dry hands

   C. Unfasten neck of gown

JOB SHEET #3

D. Pull off first sleeve by slipping fingers of other hand inside cuff (Figure 5)

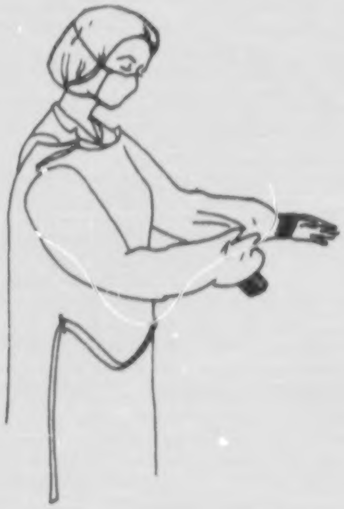
FIGURE 5



(CAUTION: Do not touch outside of cuff. The outside is contaminated; the inside of cuffs and hands are clean.)

E. Grasp second sleeve with hand inside first sleeve (Figure 6)

FIGURE 6

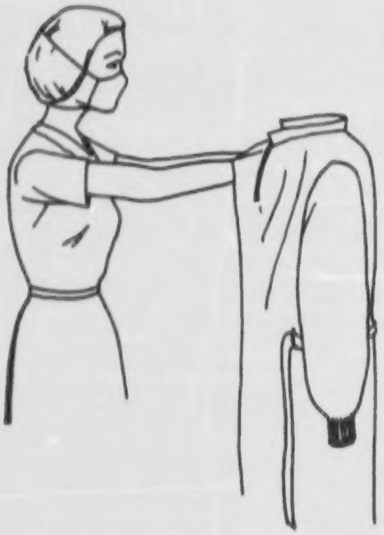


F. Pull off second sleeve

JOB SHEET #3

G. Fold gown without touching outer surface of gown by bringing shoulder seams together; hold gown away from your uniform (Figure 7)

FIGURE 7



H. Dispose of paper gowns properly and place soiled cloth gown in soiled linen receptacle

I. Wash hands

J. Remove and discard mask and head covering

K. Wash hands

ISOLATION TECHNIQUE
UNIT VIII

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with isolation technique to their correct definitions. Place the correct numbers in the blanks provided.

_____a. Necrosis of a part due to failure of blood supply, disease, or injury

_____b. Cloth used to wrap a corpse

_____c. Inflammation of the intestine, particularly the colon; due to varied causes; characterized by abdominal pain and diarrhea with blood or mucus

_____d. Exposed to pathogenic organisms

_____e. Contagious skin disorder caused by a minute insect which burrows under the skin; causes intense itching chiefly at night

_____f. Waste material eliminated by the body, including feces, urine, and perspiration

_____g. Health care procedures to prevent spread of infection or contagious disease from one person to another

_____h. Modified surgical asepsis to prevent introduction of disease-producing organisms into a patient's unit

_____i. Form of gangrene occurring in massive wounds; caused by anaerobic bacilli; characterized by high fever, offensive purulent discharge, and presence of gas bubbles in the tissues

_____j. Acute, infectious, inflammatory skin disease caused by streptococci or staphylococci; characterized by vesicles and bullae which rupture and develop crusts

_____k. Care of patient's unit and belongings after infectious period has ended or when articles are removed from the unit

1. Contaminated
2. Isolation technique
3. Dysentery
4. Excreta
5. Impetigo
6. Scabies
7. Gangrene
8. Gas gangrene
9. Terminal disinfection
10. Reverse isolation technique
11. Shroud

_____l. Separation of persons having an infection or contagious disease from others; separation of contaminated articles

_____m. Not contaminated with pathogens

_____n. Disinfection carried on daily or as often as necessary in patient care

_____o. Form of viral hepatitis transmitted by parenteral injection of human blood or blood products contaminated with hepatitis virus

_____p. Killing of pathogenic organisms by chemical or physical means; commonly used on inanimate objects

_____q. Pathological death of a cell or group of cells in contact with living tissue

_____r. Acute, infectious, inflammatory disease of the liver caused by a virus; transmitted orally; may be epidemic

12. Isolation
13. Disinfection
14. Infectious hepatitis
15. Serum hepatitis
16. Necrosis
17. Concurrent disinfection
18. Clean

2. Match ways diseases are spread on the right to their correct definitions by placing the correct numbers in the blanks provided.

_____a. Disease is spread by contaminated food, water, or medication, or by direct transfer of blood from an infected person

_____b. Disease is carried via an insect, such as a mosquito or tick, from an animal or person to another person

_____c. Disease is spread through dust or droplet particles in the air

_____d. Disease is spread by actually touching the infected person or articles he/she has handled

1. Contact
2. Vehicle
3. Airborne
4. Vector

3. Name ways to prevent the spread of disease.

a. ______________________________

b. ______________________________

c. ______________________________

4. Select from the list below purposes of isolation technique in a health facility. Place an "X" in the appropriate blanks.

_____ a. Makes nursing care easier

_____ b. Protects health care personnel and other patients

_____ c. Removes patient from source of infection

_____ d. Prevents family from interfering with patient care

_____ e. Protects patient from contracting another disease or infection

_____ f. Provides safe disposal or disinfection of equipment

5. Match diseases affecting specific systems on the right to the correct isolation techniques. Place the appropriate numbers in the blanks provided.

_____ a. Gowns must be worn and masks if patient is vomiting or coughing; excreta may have to be disinfected before disposal

_____ b. Masks and gowns must be worn and all oral and nasal discharges must be disposed of by burning

_____ c. Syringes and needles must be disposed of properly and any dressing with drainage from wounds should be burned

_____ d. Full isolation technique using gown, mask, and gloves must be carried out and all disposable items burned

1. Diseases of blood and serum
2. Diseases of gastrointestinal system
3. Diseases of skin and mucous membranes
4. Diseases of respiratory system

6. Name general principles of isolation.

a. ____

b. ____

c. ____

d. ____

7. Discuss health assistant's responsibilities to meet the emotional needs of an isolated patient.

____

____

____

____

____

8. Demonstrate the ability to:
    a. Carry out double bagging technique.
    b. Use proper isolation techniques.
    c. Put on and remove mask and gown.

(NOTE: If the above activities have not been accomplished prior to the test, ask your instructor when they should be completed.)

ISOLATION TECHNIQUE
UNIT VIII

ANSWERS TO TEST

1. a. 7
   b. 11
   c. 3
   d. 1
   e. 6
   f. 4
   g. 2
   h. 10
   i. 8
   j. 5
   k. 9
   l. 12
   m. 18
   n. 17
   o. 15
   p. 13
   q. 16
   r. 14

2. a. 2
   b. 4
   c. 3
   d. 1

3. a. Isolate patient and everything that is contacted
   b. Destroy organisms that leave patient's body
   c. Take protective measures when caring for infectious patient

4. b, c, e, f

5. a. 2
   b. 4
   c. 1
   d. 3

6. a. Each health worker is responsible for learning about the type of isolation technique used in that facility
   b. Equipment should be kept to a minimum

- c. Anything taken from unit must be disinfected, sterilized, or burned
- d. THOROUGH AND FREQUENT HANDWASHING IS THE MOST ESSENTIAL PROCEDURE

7. Discussion should include:
   - a. Explain isolation to patient and family
     1. Reasons for isolation
     2. Methods through which isolation is carried out
     3. Articles permitted for patient's use
     4. Disinfection for articles on removal
     5. Activities family can do to aid in maintaining isolation technique
   - b. Provide reassurance and emotional support
   - c. Check frequently to keep patient from feeling neglected or lonely
   - d. Provide diversions since patient will be alone much of the time
8. Performance skills evaluted to the satisfaction of the instructor

OBSERVATION AND RECORDING
UNIT IX

UNIT OBJECTIVE

After completion of this unit, the student should be able to classify skills involved in observation and distinguish between objective and subjective symptoms or signs. The student should also be able to describe the care of a patient's records and match the contents of a patient's records with their correct descriptions. The student should be able to write meanings of abbreviations and match numbers and symbols with their correct meanings. This knowledge will be evidenced through completion of the assignment sheet and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with observation and recording to their correct definitions.
2. Name purposes of observation and keeping records.
3. Classify skills involved in observation.
4. Distinguish between objective and subjective symptoms or signs which the health assistant should observe.
5. Name guidelines used in reporting observations.
6. Describe the care of the patient's record.
7. Match contents of a patient's record to their correct descriptions.
8. Name general rules for recording.
9. Name specific procedures or observations which should be recorded.
10. Write the meanings of commonly used abbreviations.
11. Match numbers and symbols to their correct meanings.
12. Record observations.

OBSERVATION AND RECORDING
UNIT IX

SUGGESTED ACTIVITIVES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and assignment sheets.

   C. Discuss information sheets.

   D. Discuss assignment sheets.

   E. Obtain charting forms from the hospital.

   F. Identify sheets of a patient's record and discuss the use of each.

   G. Play games using definitions and abbreviations.

      Examples: Concentration, Password, Bingo

   H. Discuss career opportunities and invite resource people to speak for HOSA activities.

      Examples: Ward clerks, medical librarians

   I. Give test.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

   C. Assignment Sheet #1--Record Observations

   D. Answers to assignment sheet

   E. Test

   F. Answers to test

III. Unit references:

A. Culver, Vivian M. *Modern Bedside Nursing*. Philadelphia, Pennsylvania: W. B. Saunders Company, 1969.

B. Smith, Genevieve E. *A Teaching Plan for the Practical Nursing Curriculum*. New Brunswick, New Jersey: Rutgers University Curriculum Laboratory, 1973.

C. Rogers, Helen. *Nursing I: A Course of Study.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1974.

D. Thompson, Ella M., and Rosdahl, Caroline B. *Textbook of Basic Nursing.* Philadelphia, Pennsylvania: J. B. Lippincott Company, 1973.

E. Wood, Lucille A. *Nursing Skills for Allied Health Servies.* Philadelphia, Pennsylvania: W. B. Saunders Company, 1972.

IV. Additional reference--Hospital Research and Education Trust of the AHA. *Being a Ward Clerk.* Bowie, Maryland: R. J. Brady Co., 1967.

V. Filmstrips:

A. "Observation and Charting." Trainex Coporation, P.O. Box 116, Garden Grove, CA 92642.

B. "Maintaining the Patient's Chart." Trainex Corporation.

OBSERVATION AND RECORDING
UNIT IX

INFORMATION SHEET

I. Terms and definitions

A. Observation--Gathering data and noting facts and happenings

B. Disorientation--State of mental confusion about time, place, or identity

C. Excreta--Waste material eliminated from the body, including feces, urine, and perspiration

D. Symptom--Recognizable change in the physical or mental state of a person

E. Objective symptom or sign--Evidence of disease or dysfunction that can be seen, heard, felt, smelled, or otherwise readily observed

F. Subjective symptom--Symptom felt or experienced by patient

G. Apathy--Indifference; lack of feeling or emotion

H. Stuperous--Partially or nearly unconscious

I. Coma--State of profound unconsciousness from which patient cannot be aroused

J. Sallow--Pale, yellowish skin color

K. Cyanosis--Bluish discoloration of skin due to lack of oxygen

L. Ashen--Very pale skin color

M. Mottled--Irregular, patchy skin color

N. Jaundice--Yellowness of skin and sclera of the eyes

O. Stertorous--Noisy, snoring respirations

P. Sputum--Mucous secretion from lungs, bronchi, and trachea which is expectorated from the mouth

Q. Cheyne-Stokes--Uneven respirations from strong to weak with intervals of apnea

INFORMATION SHEET

II. Purposes of observation and keeping records

   A. To provide a continuous, detailed account of patient's behavior, illness, treatment, medications, and medical care

   B. To record patient's progress and assist physician in diagnosis and in planning further medical care

   C. To serve as a guide in planning and carrying out medical care

   D. To aid other health workers in care and treatment of patient and family

   E. To provide statistical information for local, state, and national health service planning

   F. To provide information in legal proceedings, if needed

   G. To serve as source of information for research and for medical or nursing students

III. Skills involved in observation

   A. Looking

      1. Note facial expression for alertness, pain or discomfort, satisfaction, worry, or other reactions

      2. Check skin for color, rashes, evidence of pressure, breaks or other abnormal conditions

      3. Note patient's surroundings for orderliness, attractiveness, comfort, convenience, and safety

      4. Check amount, character, and color of body discharges or drainage from wounds

   B. Listening

      1. Pick up on words and tone of voice

      2. Note quality of respirations, restlessness, wakefulness, or signs of disorientation

      3. Be aware of characteristic sounds of special equipment

      4. Use a stethoscope

   C. Smelling

      1. Note any unusual odors in the environment

      2. Observe changes in the characteristic odor of human excreta and drainage from wounds

INFORMATION SHEET

D. Talking

1. Convey appropriate attitude and response to patient
2. Ask good questions
3. Communicate with members of the health care team and/or the family to aid in patient care and planning

E. Touching or feeling

1. Be able to detect abnormalities of skin or temperature by touching
2. Take pulse
3. Communicate security and ability to patient through touch

IV. Objective and subjective signs or symptoms which the health assistant should observe

A. Objective signs or symptoms

1. Height, weight, size, and general appearance
2. Facial expression
3. Deformities and obvious blemishes
4. Posture
5. Gait

   Examples: Rapid, slow, hesitant; uses cane or crutches

6. Muscular control and activity
7. Loss of an extremity or loss of function of a part
8. Mood

   Examples: Happy, content, sad, disturbed, apathetic, frightened, anxious

9. State of alertness

   Examples: Conscious, unconscious, disoriented, confused, stuporous, comatose

10. Skin color

    Examples: Pale, red, sallow, flushed, cyanotic, ashen, jaundiced, mottled

INFORMATION SHEET

11. Skin texture

    Examples: Dry, oily, dehydrated, moist; with lacerations, rashes, swelling, lesions, or pressure areas

12. Swelling or edema

    Examples: General or local

13. Sleep habits

    Examples: Length of time; quietly, restlessly, at intervals, wakeful

14. Daytime habits

    Examples: Drowsiness, need for additional pillows

15. Respirations

    Examples: Regular, noisy, labored, painful, grunting, stertorous, coughing, sneezing, Cheyne-Stokes

16. Character and amount of drainage

17. Color and amount of urine, feces, sputum, vomitus

18. Special senses

    Examples: Vision--Limited, apparently normal, wears glasses

    Hearing--Impaired, deaf, one or both ears affected, wears hearing aid

B. Subjective symptoms

1. Vertigo (dizziness)
2. Tinnitus (ringing in the ears)
3. Fatigue
4. Visual disturbances
5. Pain or discomfort (sharp or dull)
6. Nausea
7. Thirst

INFORMATION SHEET

8. Skin manifestations

   Examples: Burning, tenderness, itching

9. Fear

10. Anxiety

11. Anger

V. Guidelines used in reporting observations

(NOTE: These guidelines are not arranged according to importance. All factors will not be used in all recordings.)

A. Time when symptom was observed

B. Location (as accurately as possible)

C. Duration (length of time symptom or condition lasts)

D. Amount, color, and character of urine, feces, discharge, sputum, and drainage

E. Frequency and intensity of pain

   Examples: Intermittent or constant, severe, throbbing, dull, sharp

F. Change in patient's appearance

   Examples: Skin color, expression, behavior

G. Effect of treatment or health care measures

H. Patient's complaints using exact words when indicated

VI. Care of the patient's record

A. In current use

1. Usually all patients' charts are kept in a central area, such as the nurses' station

2. Institution has a legal and moral obligation to maintain the privacy of the patient's record

3. Chart should be accessible only to authorized persons, primarily those actively involved in the patient's care

B. For reference after patient's discharge from the institution

1. Records of discharged patients are retained by medical records department

2. Health care institutions are legally required to retain records for a length of time which varies from place to place

3. After a period of years, records may be microfilmed or made into briefs or abstracts

4. Records are not removed from the institution except under unusual circumstances, such as by an order of a court of law

VII. Contents of a patient's record

A. Identifying information--May be called information or admission sheet; gives general information about patient

(NOTE: This usually includes patient's name, address, age, Social Security number, marital status, religious preference, sex, nearest relative, insurance number, and physician's name.)

B. Physician's notes--Usually includes history of past and present illnesses, physical examination, current diagnosis, and prognosis

C. Doctor's orders--Contains all physician's orders

(NOTE: All orders must be signed by physician.)

D. Progress notes--Usually written by physician or physician's representative

E. Laboratory reports--Record of results of laboratory tests

F. Graphic sheet--For recording vital signs

G. Nurses's notes--Record of care given, including daily care, medications, treatments, vital signs, diet, and remarks

H. Special forms--Record of specific treatments or diagnostic procedures

Examples: Diabetic sheet, permission for surgery or other special treatment, intake and output records

VIII. General rules for recording

(NOTE: Recording methods vary among health care institutions. Before recording, consult the supervisor about the practices in that particular institution.)

A. Print or handwrite entries in a neat, legible form; after completing entry, sign name and title

INFORMATION SHEET

B. When a recording error is made, draw a line through the entry, then print the word "error" above it, and initial it; NEVER erase an entry

C. Record after completing a task, not before

D. Be exact in recording time, effects, and results of all treatments and procedures

E. Check with health facility to learn the ink color used for recording

(NOTE: If a record is to be microfilmed, black or blue ink may be preferred because red does not microfilm.)

F. Use a minimum number of standard abbreviations

G. Do not use ditto marks

H. Do not use the word "patient;" the complete chart refers to the patient

I. Spell correctly; use a dictionary when necessary to check spellings

J. Make statements clear, concise, and exact

K. Fill out all page headings consistently and completely before recording anything on the page

L. Record entries on "Nurses' Notes" on consecutive lines; do not skip lines

IX. Specific procedures or observations which should be recorded

(NOTE: Information regarding patient is recorded in the space designated for it. Some information, such as vital signs, may be charted in more than one place.)

A. Baths and packs--Accurate description

Example: Complete bed bath; partial assist bath and sitz bath; warm, moist packs

B. Dressings--Appearance of wound, character and amount of drainage, and type of dressing applied

C. Diet--Type and amount of food and fluids taken

D. Output--Emesis, defecation, urine, wound drainage, perspiration, and amount obtained from suction

E. Applications of heat and cold--Type, duration, location, temperature, and effects

F. Body care--Back care, mouth care, type of bath, positioning, and any special care given, such as lotions or ointments

INFORMATION SHEET

G. Activity--Amount and tolerance

H. Specimens--Kind and time sent to laboratory

I. Oxygen--Time started and discontinued and method used

J. Medication--Time, amount, method of administration, and any reaction

K. Sleep--Amount during day or night

L. Intravenous infusion--Kind, site given, rate, time started and discontinued, amount, and patient's reaction

M. Treatment, surgery, or X-ray away from patient's unit--Time patient leaves and returns to unit, mode of transportation, and destination

N. All procedures--Type, time, outcome, and reaction

O. Mental symptoms, state of consciousness, convulsions, or other new signs or symptoms

P. Physicians' visits

Q. Orders noted and action taken

R. Vital signs

X. Commonly used abbreviations

(NOTE: Others may be found in a dictionary or in books of medical terminology.)

Abbreviation	Meaning
aa	of each
abd	abdomen
ac	before meals
ad lib	as needed
a.m.	morning
amb	ambulatory, walking
amt	amount
approx	approximately
ax	axillary
bid	twice per day
BMR	basal metabolic rate
BM	bowel movement
BP	blood pressure
BRP	bathroom privileges
C	Celsius
c	with
CA or ca	cancer
cc (c.c.), cm^3	cubic centimeters

INFORMATION SHEET

Abbreviation	Meaning
CD	communicable disease
cm	centimeter
cmpd	compound
clysis	hypodermoclysis; fluid given under skin
c/o	complains of
CVA	cerebrovascular accident
DC	discontinue
dist	distilled
dr	dram
ECG (EKG)	electrocardiogram; tracing of heart function
EEG	electroencephalogram; brain wave tracing
ER	emergency room
elix	elixir
exam	examination
ext	extract
F	Fahrenheit
Fe	iron
fld	fluid
GI	gastrointestinal
gm	gram
gr	grain
gtt	drop
GU	genitourinary
gyn	gynecology
h	hour
hi-cal	high calorie
hi-vit	high vitamin
Hgb	hemoglobin
H_2O	water
hs	bedtime; hours of sleep
hypo	hypodermically
invol	involuntary; without knowledge of
irrig	irrigate or irrigation
I and O	intake and output
IV	intravenous
kg	kilogram
l	liter
lab	laboratory
lb	pound
liq	liquid
LLQ	left lower quadrant; left lower section of abdomen
LUQ	left upper quadrant
m	minim
med	medical or medication
mid	middle

INFORMATION SHEET

Abbreviation	Meaning
min	minute
mg	milligram
mm	millimeter
no or #	number
noc	night
NPO	nothing by mouth; nothing per os
O_2	oxygen
OB	obstetrics
OR	operating room
o.d.	right eye
o.u.	each eye
oz	ounce
o.s.	left eye
O.T.	occupational therapy
p	pulse
Ped, Peds, or Pedi	pediatrics
per	by or through
per os	by mouth
po	per os; by mouth
post-op	post-operative
prn	when necessary
pre-op	pre-operative
psych	psychology or psychiatry
pt	patient
PT	physical therapist or therapy
qd	every day
qh	every hour
qid	four times per day
qod	every other day
qs	quantity sufficient
r or resp	respirations
RBC	red blood cell
RLQ	right lower quadrant of abdomen
RUQ	right upper quadrant of abdomen
$\bar{s}$	without
Sol	solution
sp gr	specific gravity
s.s.	soapsuds
$\overline{ss}$	one-half
stat	at once
surg	surgical
tab	tablet
tid	three times per day
TLC	tender, loving care
TPR	temperature, pulse, respiration
tr	tincture
ung	ointment
VD	venereal disease
via	by way of
WBC	white blood cell
wt	weight

INFORMATION SHEET

XI. Numbers and symbols commonly used in recording

(NOTE: These are standard and are used most frequently. Others may be found in a dictionary, books of medical terminology, or pharmacology books.)

one-- i

two-- ii

three-- iii

four-- iv

five-- v

six-- vi

and-- et, +, &

three ounces-- ℥iii

dram-- ʒ

one-half-- $\overline{ss}$

seven-- vii

eight-- viii

nine-- ix

ten-- x

eleven-- xi

twelve-- xii

one and one-half-- $\overline{iss}$

two drams-- ʒii

ounce-- ℥

one-half grain-- gr $\overline{ss}$

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OBSERVATION AND RECORDING
UNIT IX

ASSIGNMENT SHEET #1--RECORD OBSERVATIONS

You are assigned to Patient B in Rm. 205 today. Patient B does not seem very talkative and is complaining of feeling cold. Vital signs are Temperature: 99.6; Pulse: 96; Respirations: 24; and Blood Pressure: 156/92. When you help with the bath, Patient B's hands and feet are cold and clammy and the nail beds are very blue. The bedpan is full of urine and patient states grumpily that it's been like that all night and no one has emptied it. There are bruised-looking areas on the lower back and right leg. Patient complains of cramping and tenderness in that leg. Patient is also taking very shallow breaths, and you note some wheezing.

1. From the information above, list the most important observations below. Place an "S" by subjective symptoms and an "O" by objective symptoms.

2. List below other observations that still need to be noted. Place an "S" by subjective symptoms and an "O" by objective symptoms.

OBSERVATION AND RECORDING
UNIT IX

ANSWERS TO ASSIGNMENT SHEET #1

1. a. Low grade, elevated temperature--O
   b. Diastolic blood pressure high--O
   c. Blue nail beds and cold, clammy hands--O
   d. Cramping and tenderness in right leg--S
   e. Wheezing-O
   f. Short of breath--O
2. a. Bruised lower back and right leg--O
   b. Noncommunicative--O
   c. Bed pan not emptied--O

OBSERVATION AND RECORDING
UNIT IX

TEST

NAME ______________________________ SCORE ________________

1. Match terms associated with observation and recording to their correct definitions by placing the appropriat numbers in the blanks provided.

______a. Evidence of disease or dysfunction that can be seen, heard, felt, smelled, or otherwise readily observed

______b. Bluish discoloration of skin due to lack of oxygen

______c. State of profound unconsciousness from which patient cannot be aroused

______d. Recognizable change in the physical or mental state of a person

______e. Mucous secretion from lungs, bronchi, and trachea which is expectorated from the mouth

______f. Noisy, snoring respirations

______g. Yellowness of skin and sclera of the eyes

______h. Very pale skin color

______i. Partially or nearly unconscious

______j. Pale, yellowish skin color

______k. Indifference; lack of feeling or emotion

______l. Waste material eliminated from the body, including feces, urine, and perspiration

______m. State of mental confusion about time, place, or identity

______n. Gathering data and noting facts and happenings

______o. Symptom felt or experienced by patient

______p. Irregular, patchy skin color

______q. Uneven respirations from strong to weak with intervals of apnea

1. Symptom
2. Jaundice
3. Observation
4. Apathy
5. Subjective symptom
6. Ashen
7. Disorientation
8. Coma
9. Sputum
10. Mottled
11. Excreta
12. Stertorous
13. Stuporous
14. Sallow
15. Cyanosis
16. Objective symptom or sign
17. Cheyne-Stokes

2. Name five purposes of observation and keeping records.

   a. ______________________________

   b. ______________________________

   c. ______________________________

   d. ______________________________

   e. ______________________________

3. Classify skills involved in observation. Place an "L" for each looking skill, an "LS" for each listening skill, an "S" for each smelling skill, a "T" for each talking skill, and a "TF" for each touching or feeling skill in the blanks provided.

   ______a. Use stethoscope

   ______b. Observe changes in characteristic odor of human excreta and drainage from wounds

   ______c. Be able to detect abnormalities of skin or temperature by touching

   ______d. Convey appropriate attitude and response to patient

   ______e. Note patient's surroundings for orderliness, attractiveness, comfort, convenience, and safety

   ______f. Pick up on words and tone of voice

   ______g. Take pulse

   ______h. Check skin for color, rashes, evidence of pressure, breaks, or other abnormal conditions

   ______i. Note any unusual odors in the environment

   ______j. Be aware of characteristic sounds of special equipment

   ______k. Ask good questions

   ______l. Communicate security and ability to patient through touch

   ______m. Note facial expression for alertness, pain or discomfort, satisfaction, worry, or other reactions

   ______n. Note quality of respirations, restlessness, wakefulness, or signs of disorientation

   ______o. Communicate with members of the health care team and/or the family to aid in patient care and planning

   ______p. Check amount, character, and color of body discharges or drainage from wounds

4. Distinguish between objective and subjective symptoms or signs which the health assistant should observe. Place an "O" for the objective symptoms and an "S" for the subjective symptoms in the blanks.

_____a. Visual disturbances

_____b. Character and amount of drainage

_____c. Anger

_____d. Anxiety

_____e. Skin color

_____f. Skin texture

_____g. Facial expression

_____h. Tinnitus (ringing in the ears)

_____i. Skin manifestations

_____j. Thirst

_____k. Nausea

_____l. Special senses

_____m. Fatigue

_____n. Color and amount of urine, feces, sputum, vomitus

_____o. Posture

_____p. Mood

_____q. Height, weight, size, and general appearance

_____r. Gait

_____s. Vertigo (dizziness)

_____t. Muscular control and activity

_____u. Deformities and obvious blemishes

_____v. Fear

_____w. Pain or discomfort (sharp or dull)

_____x. Respirations

_____y. Sleep habits

_____z. Swelling or edema

______aa. Loss of an extremity or loss of function of a part

______bb. State of alertness

______cc. Daytime habits

5. Name guidelines used in reporting observations.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

h. ____

6. Describe the care of the patient's record.

____

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7. Match contents of a patient's record on the right to their correct descriptions. Place the correct numbers in the appropriate blanks.

______a. For recording vital signs

______b. Usually includes history of past and present illnesses, physical examination, current diagnosis and prognosis

______c Usually written by physician or physician's representative

______d. May be called information or admission sheet; gives general information about patient

______e. Contains all physician's orders

______f. Record of results of laboratory tests

______g. Record of care given, including daily care, medications, treatments, vital signs, diet, and remarks

______h. Record of specific treatments or diagnostic procedures

1. Identifying information
2. Physician's notes
3. Doctor's orders
4. Progress notes
5. Laboratory reports
6. Graphic sheet
7. Nurses' notes
8. Special forms

8. Name five general rules for recording.

a. ____

b. ____

c. ____

d. ____

e. ____

9. Name ten specific procedures or observations which should be recorded.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

h. ______________________________

i. ______________________________

j. ______________________________

10. Write the meaning of the commonly used abbreviations given below.

a. gtt ______________

b. s̄ ______________

c. stat ______________

d. s̄s̄ ______________

e. prn ______________

f. po ______________

g. BP ______________

h. ac ______________

i. amb ______________

j. dr ______________

k. c ______________

l. RBC ______________

m. tab ______________

n. tid ______________

o. qid ______________

p. TPR ______________

q. CD ______________

r. c/o ______________

11. Match numbers and symbols on the right to their correct meanings.

_____a. And

_____b. Four

_____c. One-half

_____d. Dram

_____e. Eleven

_____f. Seven

_____g. Two

_____h. Twelve

_____i. One and one-half

_____j. Ten

_____k. One-half grain

_____l. Six

_____m. Three

_____n. Two drams

_____o. Nine

1. vii
2. iv
3. ʒ
4. xi
5. ii
6. xii
7. s̄s̄
8. et, +, &
9. īs̄s̄
10. x
11. ix
12. ʒii
13. vi
14. gr s̄s̄
15. iii

______p. One

______q. Ounce

______r. Three ounces

______s. Five

______t. Eight

16. ℥ iii
17. i
18. ℥
19. viii
20. v

12. Record observations.

(NOTE: If the above activity has not been accomplished prior to the test, ask your instructor when it should be completed.)

OBSERVATION AND RECORDING
UNIT IX

ANSWERS TO TEST

1. a. 16
   b. 15
   c. 8
   d. 1
   e. 9
   f. 12
   g. 2
   h. 6
   i. 13
   j. 14
   k. 4
   l. 11
   m. 7
   n. 3
   o. 5
   p. 10
   q. 17

2. Answer should include any five of the following:

   a. To provide a continuous, detailed account of patient's behavior, illness, treatment, medications, and medical care

   b. To record patient's progress and assist physician in diagnosis and in planning further medical care

   c. To serve as a guide in planning and carrying out medical care

   d. To aid other health workers in care and treatment of patient and family

   e. To provide statistical information for local, state, and national health service planning

   f. To provide information in legal proceedings, if needed

   g. To serve as source of information for research and for medical or nursing students

3. a. LS
   b. S
   c. TF
   d. T
   e. L
   f. LS
   g. TF
   h. L
   i. S
   j. LS
   k. T
   l. TF
   m. L
   n. LS
   o. T
   p. L

4. a. S
   - b. O
   - c. S
   - d. S
   - e. O
   - f. O
   - g. O
   - h. S
   - i. S
   - j. S
   - k. S
   - l. O
   - m. S
   - n. O
   - o. O
   - p. O
   - q. O
   - r. O
   - s. S
   - t. O
   - u. O
   - v. S
   - w. S
   - x. O
   - y. O
   - z. O
   - aa. O
   - bb. O
   - cc. O

5. a. Time (when symptom was observed)
   - b. Location (as accurately as possible)
   - c. Duration (length of time symptom or condition lasts)
   - d. Amount, color, and character of urine, feces, discharge, sputum, and drainage
   - e. Frequency and intensity of pain
   - f. Change in patient's appearance
   - g. Effect of treatment or health care measures
   - h. Patient's complaints using exact words when indicated

6. Description should include:
   - a. In current use
     1. Usually all patient's charts are kept in a central area, such as the nurses' station
     2. Institution has a legal and moral obligation to maintain the privacy of the patient's record

    3. Chart should be accessible only to authorized persons, primarily those actively involved in the patient's care

  b. For reference after patient's discharge from the institution

    1. Records of discharged patients are retained by medical records department

    2. Health care institutions are legally required to retain records for a length of time which varies from place to place

    3. After a period of years, records may be microfilmed or made into briefs or abstracts

    4. Records are not removed from the institution except under unusual circumstances, such as by an order of a court of law

7. a. 6

   b. 2

   c. 4

   d. 1

   e. 3

   f. 5

   g. 7

   h. 8

8. Any five of the following:

   a. Print or handwrite entries in a neat, legible form; after completing entry, sign name and title

   b. When a recording error is made, draw a line through the entry, print the word "error" above it, and initial it; NEVER erase an entry

   c. Record after completing task, not before

   d. Be exact in recording time, effects, and results of all treatments and procedures

   e. Check with health facility to learn the ink color used for recording

   f. Use a minimum number of standard abbreviations

   g. Do not use ditto marks

h. Do not use the word "patient;" the complete chart refers to the patient

i. Spell correctly; use a dictionary when necessary to check spellings

j. Make statements clear, concise, and exact

k. Fill out all page headings consistently and completely before recording anything on the page

l. Record entries on "Nurses' Notes" on consecutive lines; do not skip lines

9. Answer should include any ten of the following:

a. Baths and packs--Accurate descriptions

b. Dressings--Appearance of wound, character and amount of drainage, and type of dressing applied

c. Diet--Type and amount of food and fluids taken

d. Output--Emesis, defecation, urine, wound drainage, perspiration, and amount obtained from suction

e. Applications of heat and cold--Type, duration, location, temperature, and effects

f. Body care--Back care, mouth care, type of bath, positioning, and any special care given, such as lotions or ointments

g. Activity--Amount and tolerance

h. Specimens--Kind and time sent to laboratory

i. Oxygen--Time started and discontinued and method used

j. Medication--Time, amount, method of administration, and any reaction

k. Sleep--Amount during day or night

l. Intravenous infusion--Kind, site given, rate, time started and discontinued, amount, and patient's reaction

m. Treatment, surgery, or X-ray away from patient's unit--Time patient leaves and returns to unit, mode of transportation, and destination

n. All procedures--Type, time, outcome, and reaction

o. Mental symptoms, state of consciousness, convulsions, or other new signs or symptoms

p. Physicians' visits

q. Orders noted and action taken

r. Vital signs

10. a. drop
b. without
c. at once
d. one-half
e. when necessary
f. per os; by mouth
g. blood pressure
h. before meals
i. ambulatory, walking
j. dram
k. with
l. red blood cell
m. tablet
n. three times per day
o. four times per day
p. temperature, pulse, respiration
q. communicable disease
r. complains of

11. a. 8
b. 2
c. 7
d. 3
e. 4
f. 1
g. 5
h. 6
i. 9
j. 10
k. 14
l. 13
m. 15
n. 12
o. 11
p. 17
q. 18
r. 16
s. 20
t. 19

12. Performance skill evaluated to satisfaction of instructor